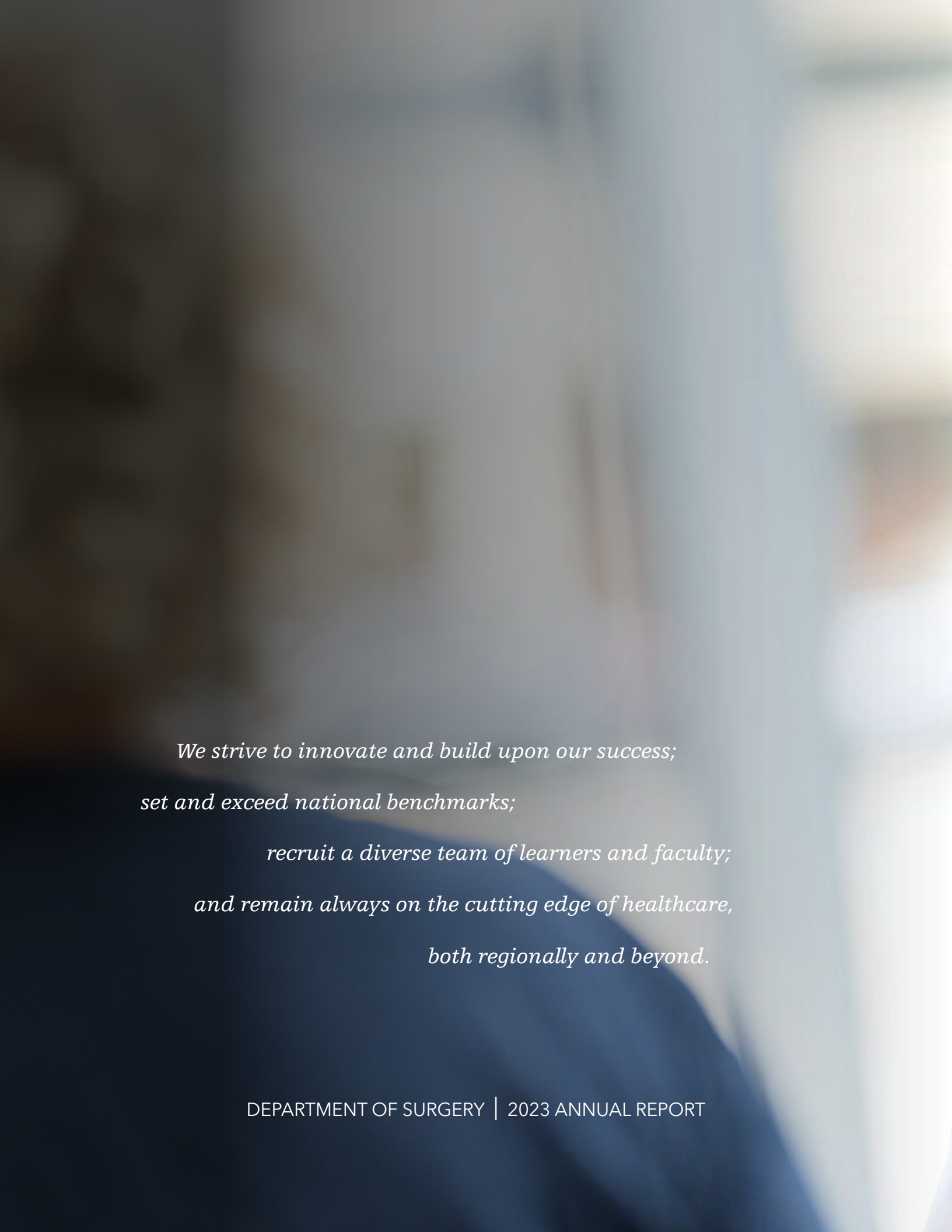





DEPARTMENT OF SURGERY | 2023 ANNUAL REPORT

KENTUCKY ROOTS WITH **GLOBAL REACH**



*We strive to innovate and build upon our success;
set and exceed national benchmarks;
recruit a diverse team of learners and faculty;
and remain always on the cutting edge of healthcare,
both regionally and beyond.*



 Health Care

Cortney Y. Lee, MD, FACS
Endocrine Surgery

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ON THE COVER

As the UK Department of Surgery continues its focus on transformative care, this often takes providers outside the region to advance their own experience as well as lend their talents to those in need. Several articles in this edition highlight the global reach many of the department's surgeons have had, including James Liao, M.D., a plastic surgeon who makes an annual pilgrimage to perform cleft lip and palate repairs in South America.

Read more about Dr. Liao's work on Page 30.





UK Department of Surgery Faculty and Residents 2023.

MESSAGE FROM THE CHAIR

To lead the Department of Surgery at the University of Kentucky is not only an honor but a privilege. One thing is certain: the members of our department, those highlighted in this publication, are what make UK Surgery so special. Complementing our stellar faculty by recruiting additional surgeons of equal caliber, we have assembled an all-star team to provide Kentuckians the best possible surgical care. We also invest in medical student and resident education, arming the next generation of surgeon leaders with the skills to deliver compassionate, high-quality treatment.

In keeping with our core mission of serving those in need, our faculty, residents and students navigate with dignity the increasingly complex healthcare environment where social needs intersect with care delivery.

In the last two years, communities in eastern and western Kentucky were beset by destructive flash floods and devastating tornadoes. These natural disasters underscore the critical importance of a statewide trauma response system. They also demonstrate the necessity for healthcare providers to be prepared to treat patients under conditions where access to technology and advanced resources are suddenly limited.

These challenging circumstances illustrate why the UK Department of Surgery values its history of service with international relief organizations and why Global Surgery is one of our seven foundational pillars. There will be times when resourcefulness, creativity, and innovation outweigh the convenience of the latest technology.

The 2023 edition of the Surgery Annual Report highlights the incredible contributions of our alumni and faculty in global health initiatives that advance the department's commitment to leadership, professional development, quality, innovation and service.

Our department is comprised of an increasingly diverse group of individuals who are committed to advancing healthcare in the Commonwealth through the pursuit of clinical excellence, education and scientific advancement. Over the last four years, 37 new faculty have joined the department, including under-represented minorities and more women than men (recruits: 54% female).

Furthermore, Surgery has embraced the rollout of a new EMR platform (EPIC), managed the implementation of a new funds flow model, and are now poised for continued progress along our established measures of success.

We continue to look outward so that we will remain best equipped to care for the people of our great Commonwealth.



William B. Inabnet III, MD, MHA, FACS
The Johnston-Wright Endowed Professor and
Chair of Surgery
Surgeon-in-Chief, UK HealthCare

FOUNDATIONAL PILLARS

SUPPORTING A GREATER GOOD

The pillars of any institution determine its path to success. Strong and reliable, they serve as an integral piece of the foundational structure. Moving toward its eighth decade, the UK Department of Surgery established these pillars as a symbol of its commitment to education, research and patient care.

Serving as guideposts along the course of strategic initiatives, these pillars help to identify the department's areas of success and how to continue along this trajectory.

Although unique, each pillar affords great opportunity on its own. Yet put them together and they form an intricate framework that supports the Department of Surgery's long-term collaborative aspirations and goals.



Philanthropic support continues to be vital to the department's continued success and serves as a key accelerator for pillar-based initiatives. To learn more about giving opportunities, contact Lindsey Clem, director of philanthropy at jlclcm4@uky.edu or make a gift using the QR code.



Optimal Patient Care

Deliver unparalleled, patient-centered clinical care



Education

Inspire the next generation of surgeons toward advanced skill and utmost knowledge



Research

Yield new knowledge and advance scientific discovery



Innovation

Pursue collaborative partnerships to advance scientific discovery



Leadership & Professional Development

Advocate, at local and national levels, to develop impactful surgeon leaders



Professionalism, Integrity and Equity

Foster an environment that removes barriers and promotes unbiased access for all



Global Surgery

Provide humanitarian surgical services to underserved communities the world over

DIVISIONS

SURGERY DIVISIONS FOSTER A UNIFIED FRONT

In 2021, the Department of Surgery ushered in a new strategy that would provide a roadmap to ensure organizational success. This new model – supported by the department’s seven foundational pillars – has afforded each division the autonomy to facilitate decision-making in line with its mission.

Depending on the number of providers, each division consists of five to 15 surgeons who work as a team to build their identity using their given resources. This flexibility allows each division to plan their own approach to deepen regional, national and even global significance.

Along with the new clearly defined divisions came the Division of Research and the Division of Healthcare Outcomes and Optimal Patient Services (HOOPS). By establishing these common affiliations, each division is guided by their individual directives that puts achieving top 10 National Institutes of Health funding status as the unifying goal.

The divisions of the UK Department of Surgery are:

- Acute Care Surgery, Trauma and Surgical Critical Care
- Cardiothoracic Surgery
- Colon and Rectal Surgery
- General, Endocrine, and Metabolic Surgery (GEMS)
- Healthcare Outcomes and Optimal Patient Services (HOOPS)
- Pediatric Surgery
- Plastic and Reconstructive Surgery
- Research
- Surgical Oncology
- Transplantation
- Vascular and Endovascular Surgery



ACUTE CARE SURGERY, TRAUMA AND SURGICAL CRITICAL CARE

2,223

2021 Surgical Cases

2,388

2022 Surgical Cases*

3,823

2021 Clinic Visits

3,774

2022 Clinic Visits*

4

2021 Industry-sponsored,
Federal, and NIH grants

\$205,989

2021 Contract Income

*Decreased numbers attributed to COVID-19 pandemic and its impact on healthcare, globally.

SURVIVOR'S NETWORK SUPPORTS RECOVERY

UK HealthCare launched its Trauma Survivor's Network (TSN) program in May 2022 under the guidance of the UK Trauma Program Office and Baillie McCane, trauma outreach coordinator. The program is the culmination of UK Trauma's vision to provide services beyond just the treatment and recovery of physical injuries to victims of trauma.

Being both an Adult Level 1 and a Pediatric Level 1 Trauma Center, the UK HealthCare trauma teams assure families that all personnel are prepared and equipped to handle any kind of trauma case that comes through the emergency room doors.

"Mental health has often been recognized as an extraneous element of physical health, and not treated with as much importance as physical health," said McCane. "Evidence has proven the importance of early screening and identification of mental health issues and the role that mental health plays in an individual's overall health."

Trauma programs are now utilizing a trauma-informed care approach to address physical and mental issues. The UK HealthCare trauma service is led by Trauma Program Manager Amber Van, RN, TCRN; Pediatric Trauma Medical Director Andrea Doud, M.D.; and Trauma Medical Director Andrew Bernard, M.D.; each recognize the importance of follow-up care, which compelled them to become part of the TSN program developed by the American Trauma Society. McCane also serves as the trauma survivors network coordinator, leading the University of Kentucky to become an official TSN site in 2021.

It is no longer enough to just treat the injury or illness. If trauma services don't provide that extra step and connect people to some kind of support, patients can experience frustration, enter periods of depression, or suffer post-traumatic stress disorder (PTSD). These potential problems could be mitigated if there was some kind of follow-up intervention. Trauma providers and nurses can now refer eligible patients – those they recognize that need additional assistance and support – to McCane, who will help them connect with services they need.

"It is our hope to get patients the support they need for a full recovery," McCane said.

HIGHLIGHTS



Acute Care Welcomes Dr. Margaret Griffen

Margaret Griffen, M.D., is an associate professor in the Division of Acute Care Surgery, Trauma, and Surgical Critical Care. She came to the UK Department of Surgery in October 2021. Upon her arrival, Dr. Griffen was appointed Vice-Chair for Leadership and Professional Development for the Department of Surgery due to her national reputation as a leader, educator and champion of continuing professional development at all levels.

Dr. Griffen graduated from the UK College of Medicine in 1993 and stayed at UK to complete her general residency and two-year trauma and acute care fellowship (serving as the first graduate of this fellowship). Before joining UK, she served as both the Division Chief of Trauma and Acute Care Surgery and Medical Director of the Inova Fairfax Hospital Trauma Center in Inova, Virginia.



EHR System Proves Valuable for Trauma Team

When UK HealthCare began the task of transitioning to the Epic Electronic Health Record (EHR) system in 2020, the Trauma team recognized that the software could have a profound impact on improving patient care in the Emergency Department. Zach Warriner, M.D., assistant professor of surgery, accepted the challenge to custom design the EHR system to expedite patient care and use existing data to improve physician workflow.

Before EHR, there was limited communication about a patient's history before they arrived in the emergency room. Thanks to EHR, trauma teams now have access to a patient's full medical history, including recent imaging and triage information, before they arrive in the ER.

But the most appealing facet of the EHR system, Dr. Warriner explained, is its flexibility in how it presents patient information. Its data can be tailored into a consistent format for trauma teams to review.

FACULTY



Andrew C. Bernard, MD, FACS
Division Chief



Margaret Griffen, MD, FACS
Vice Chair for Leadership and Professional Development



Tyler Koestner, MD



Meir B. L. Meerkov, MD



Alexis Nickols, MD



Jessica Kathleen Reynolds, MD, FACS
Fellowship Director, Critical Care Surgery



Brian K. Tucker, DO



Zachary D. Warriner, MD, FACS



Brittany Wheelock, MD

CARDIOTHORACIC SURGERY

1,392

2021 Adult Surgical Cases

1,570

2022 Adult Surgical Cases*

5,747

2021 Adult Clinic Visits

5,660

2022 Adult Clinic Visits*

71

2021 Pediatric Surgical Cases

81

2022 Pediatric Surgical Cases*

104

2021 Pediatric Clinic Visits

137

2022 Pediatric Clinic Visits

6

2021 Industry-sponsored, Federal, and NIH grants

\$198,569

2021 Contract Income

*Decreased numbers attributed to COVID-19 pandemic and its impact on healthcare, globally.

SMALL INCISION, LARGE IMPACT

RESIDENT TRAINING INCLUDES MIS CURRICULA

Advances in medical technology are making minimally invasive (MIS) techniques a possibility for a number of complex cardiac and thoracic surgeries. But these innovations have impacted more than just patient care. For the UK Cardiothoracic (CT) Surgery Residency program, core faculty are using that same technology to train surgical residents in video-assisted thoracoscopic surgery (VATS) and robotic-assisted procedures.

Dr. Tessa London-Bounds, director of CT Surgery Wet Lab Training, is working with colleagues Erinn Ogburn, M.D., Mansi Shah, M.D., and Clinton Morgan, M.D., to direct the focus of the division's monthly wet lab sessions to mentor residents in low-risk, hands-on experiences in small-incision surgery.

Working in tandem with Shari Meyerson, M.D., director of the CT division's residency and thoracic fellowship programs, this team of surgical educators are fine-tuning curricula on minimally invasive techniques for their respective surgical specialties. These approaches include novel use of wet labs combined with virtual simulations to teach advanced CT procedures.

In a recent instance of this collaborative approach, Dr. London-Bounds and Dr. Shah planned to bring animal tissue and da Vinci Xi robotic surgery consoles for a special thoracic-based surgical wet lab. Consoles were available for an entire day so that residents and 4th-year medical students could interact with its unique controls and 3D optical camera system.

"Residents and fellows have already been working with robotics and VATS procedures in simulation and actual practice situations," said Dr. Shah. "This wet lab was a way for residents to solidify their basic skills in an environment as close as possible to actual OR procedures. It took their skill development to the next level."

The overall goals of the CT division's surgical training programs are to give learners broad exposure to all modes of surgery: Open technique, VATS, and robot-assisted surgery. In the latter years of their training,

faculty members mentor them on ways to hone their skills toward surgical autonomy in their chosen specialty.

"It's important that we introduce residents to various modes of minimally invasive surgery right from their first year," said Dr. London-Bounds. In recent years, for example, the residency program adopted MIS training in atrial fibrillation using cadavers that gave residents excellent experience on positioning instruments and working with human anatomy, she said.

Drs. Shah, Morgan, and Ogburn have pursued a similar trajectory to train residents in robotics-assisted thoracic surgery. All three surgeons are making their UK practices primarily robotics-based and have applied their experience to develop a curriculum for residents. Wet labs and surgical simulations, in addition to operating room experience, have long played important roles in the surgical training process.

"There are no options but for academic surgery residencies to keep their training modules current as new standards for CT surgery evolve," said Dr. London-Bounds. "As our residents transition to the professional ranks, the expectations UK has for its trainees is that they will be well-prepared to work in any given mode the patient needs."

"It's important that we introduce residents to various modes of minimally-invasive surgery right from their first year."

Tessa London-Bounds, M.D.

DONOR ORGANS BECOME MORE VIABLE

The UK Transplant Center entered into an agreement with TransMedics to utilize the Organ Care System (OCS), an innovative technology capable of transporting donor organs – both hearts and lungs – long distances for transplant. With this machine, the pool of suitable donor organs expands significantly, good news for Kentuckians on transplant waiting lists and those who are being evaluated for new organs.

The OCS technology creates a natural state that mimics human body systems to allow hearts and lungs to stay in optimal condition while being transported to the patient. Blood is pumped through the vessels and the box maintains a comfortable temperature.

In March 2022, the machine was first used by UK HealthCare to transport a pair of lungs over 300 miles to Albert B. Chandler

Hospital where they were transplanted into a waiting patient by the lung transplant team. A representative from TransMedics accompanied the machine on a plane, where the health and status of the lungs were continuously monitored. Once the machine arrived at Chandler Hospital, the lungs were again inspected and tested before being transplanted into the patient. While the first lung was being implanted, the other lung was still being ventilated and perfused on the OCS device.

Traditionally, lungs and hearts, like other organs destined for transplant, are transported in cold static preservation. Kidneys and livers can easily be transported this way, but lung and heart systems are far more delicate. Prolonged exposure to cold can damage lung tissue and blood vessels and because of this, organs that could be transplanted are rejected simply



Dr. Sravanthi Nandavaram and the lung transplant team at the UK HealthCare Transplant Center reached a major milestone in 2023, successfully performing its 500th lung transplant. The team has also set records for lung transplants in a single year, including several double lung transplant procedures.

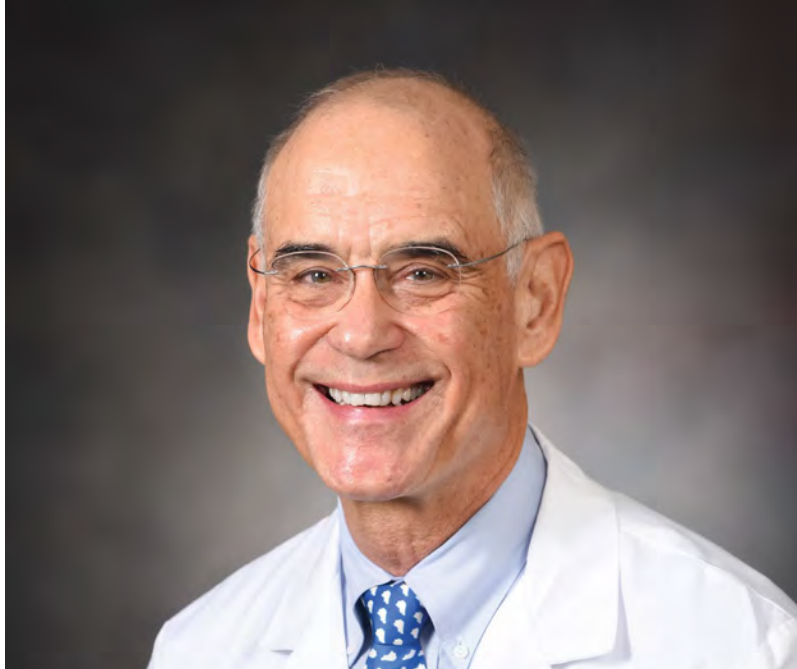
because they can't withstand long journeys. Using this device, the donor pool expands by using heart donations after cardiac death and lungs that may be transplantable but do not meet the criteria for ideal donor lungs. These are called marginal donor lungs.

Patients who receive organs that were transported by the OCS have better outcomes than those that were in cold storage. Studies on transplanted lungs showed a 50% reduction in primary graft dysfunction, a severe complication that can occur within 72 hours of transplantation and is the major cause of early mortality in lung transplant patients.

The OCS Heart is the only system used in donation after cardiac death (DCD) heart transplantation, with the first one performed at UK HealthCare in August 2022. According to Julia Jones Akhtarekhavari, the heart failure operations director at UK Gill Heart & Vascular Institute, using the OCS heart system affords UKHC access to a larger pool of donors, thereby providing more patients with the chance of heart transplantation.

"This unique transport process will allow us to travel farther and wider in search of viable lungs and help ensure that lungs arrive to us in better shape for transplantation."

Sravanthi Nandavaram, M.D.



Dr. Zwischenberger Wins William R. Willard Award

The UK College of Medicine awarded Joseph (Jay) B. Zwischenberger, M.D. – professor of surgery, pediatrics, interventional radiology, and bioengineering – the prestigious William R. Willard Dean's Recognition Award. He was honored at the 2022 College of Medicine Awards Convocation. Named after the college's founding dean, the William R. Willard Award recognizes individuals who have demonstrated significant and longstanding dedication to medical education. "Dr. Zwischenberger is deserving of this award and is a wonderful role model for students, trainees, and early-career faculty," said Dean Charles Griffith, M.D., "It is an honor for the college to have such a clinical talent, extraordinary teacher, and pioneer of education serve on our team."

As an internationally recognized general thoracic surgeon and educator, Dr. Zwischenberger has held numerous leadership positions within the UK College of Medicine, including: the Johnston-Wright Professor and Chair of Surgery from 2007-2019, surgeon-in-chief for UK HealthCare from 2010-2019 and director of the UK Transplant Center from 2007-2012. In addition to this recognition, Dr. Zwischenberger was also awarded the Jason Alexander Gill Professorship in Cardiothoracic Surgery.

Dr. Zwischenberger developed the "Zwisch Model," a feedback tool for assessing resident autonomy and performance in the operating room. The model led to the Society for Improving Medical Professional Learning (SIMPL) Operating Room smartphone application, which is used as a platform for real-time workplace feedback. SIMPL now includes more than 200 residency programs and 19 specialties in the United States and seven countries.

Gov. Beshear Signs Bill Establishing Lung Cancer Screening Program

Kentucky has the highest incidence of lung cancer diagnosis and mortality in the United States. Yet a new statewide lung cancer screening program will help to reverse this statistic and save thousands of lives through early detection. Gov. Andy Beshear held a signing ceremony July 15, 2022, for House Bill 219, which establishes a lung cancer screening program in the Kentucky Department for Public Health.

The Kentucky Cancer Consortium (KCC) Lung Cancer Network and the Kentucky LEADS (Lung Cancer Education Awareness Detection Survivorship) Collaborative – both housed at UK’s Markey Cancer Center – were created soon after lung cancer screening guidelines were first approved in 2013. Since then, Kentucky has experienced early success in lung cancer screening, thanks to these efforts to convene many partners throughout the state to work together and leverage the power of collaboration. The excitement about this momentum and ongoing discussions in the KCC Lung Cancer Network helped to fuel the inspiration for this new program.

“Because of our collaborative work with many organizations and individuals in early detection in lung cancer, we are seeing decreases in late-stage lung cancer that we have not seen before,” said Timothy Mullett, M.D., a professor of cardiothoracic surgery, the medical director of the UK Markey Cancer Center Affiliate and Research Networks, and co-principal investigator of the Kentucky LEADS Collaborative. “HB-219 will continue to help reduce the impact of this disease in the Commonwealth by increasing access to the lifesaving procedure for thousands of uninsured and underinsured Kentuckians.”

HIGHLIGHTS



Dr. Jin Woo Chung Joins CT Surgery Division

UK’s Division of Cardiothoracic (CT) Surgery and Department of Surgery welcomes new faculty member, Jin Woo Chung, M.D., Ph.D. Dr. Chung is a highly respected specialist in heart and lung transplantation, organ procurement, mechanical circulatory support, and advanced heart failure. Dr. Chung joins the growing roster of outstanding cardiac and vascular surgeons at UK Gill Heart and Vascular Institute. He obtained clinical experience in the prestigious cardiovascular, thoracic, and cardiac surgical programs at Cleveland Clinic.

In addition to his role in CT Surgery, Dr. Chung will be integrated into the heart and lung transplant teams at UK HealthCare and participate in cardiac and thoracic organ procurement efforts.



Dr. Erinn Ogburn Returns to UK as Cardiothoracic Surgery Faculty

After a year working in Robotic and Minimally Invasive Cardiac Surgery at Cleveland Clinic, Erinn Ogburn, M.D., returned to UK HealthCare in September 2022 as a new faculty member in the Division of Cardiothoracic Surgery. Dr. Ogburn, a 2021 alum of UK’s Integrated (I-6) Cardiothoracic Surgery Residency program, is among that program’s first class of residents. In 2020, she earned recognition from UK Cardiothoracic Surgery as the Most Valuable Resident Colleague and later accepted an offer to join the UK faculty.

“Throughout her residency, [Dr. Ogburn] demonstrated an excellent surgical skillset, a solid work ethic, and an ability to focus,” said Michael Sekela, M.D., division chief of Cardiothoracic Surgery. “I am excited that she chose to return to UK.” Dr. Ogburn completed a one-year fellowship in robotic and minimally invasive cardiac surgery at Cleveland Clinic before her return to UK. “I am excited to return to the Commonwealth and to help grow the outstanding Cardiothoracic care team at the University of Kentucky,” she said.

FACULTY



**Michael Sekela, MD,
FACS**
Division Chief



**Carl L. Backer,
MD, FACS**
Section Chief, Pediatric
Cardiothoracic Surgery



Jin W. Chung, MD



**Tessa London-Bounds,
MD**



**Rajasekhar Malyala,
MD**



**Shari Meyerson, MD,
M.Ed., FACS**
Section Head of Thoracic
Surgery; Director of I-6
CT Residency and CT
Fellowship



Jordan Miller, DO



**Clinton Morgan,
MD, PhD**



**Timothy Wm. Mullett,
MD, MBA, FACS**
Medical Director,
Markey Cancer Center
Network Development



**Sravanthi
Nandavaram, MBBS**



Erinn A. Ogburn, MD



**Hassan Reda,
MD, FACS**



**Sibu Saha, MD, MBA,
FACS**



Mansi M. Shah, MD
Assistant Medical
Student Clerkship
Director



**William J. Wallen,
MD, PhD**



**Joseph B.
Zwischenberger, MD,
FACS**



**Naureen Narula,
MBBS**

COLON & RECTAL SURGERY

1,024

2021 Surgical Cases

1,207

2022 Surgical Cases

4,432

2021 Clinic Visits

4,745

2022 Clinic Visits*

1

2021 Industry-sponsored, Federal, and NIH grants

\$16,370

2021 Contract Income

*Decreased numbers attributed to COVID-19 pandemic and its impact on healthcare, globally.

MARKEY EARNS ACCREDITATION FOR RECTAL CANCER PROGRAM

The University of Kentucky Markey Cancer Center has earned a three-year accreditation from the National Accreditation Program for Rectal Cancer (NAPRC). UK Markey Cancer Center is one of around 60 centers in the nation and the first in Kentucky to hold this designation.

To achieve the accreditation—a quality assurance program established by the American College of Surgeons—Markey Cancer Center was able to demonstrate compliance with standards addressing program management, clinical services and quality improvement for patients, as well as create a multidisciplinary rectal cancer team including clinical representatives from surgery, pathology, radiology, radiation oncology, and medical oncology.

“We are proud to be among the leaders in the field of rectal cancer who have earned the rigorous NAPRC accreditation,” said Sandra Beck, M.D., surgeon and section head of Markey Colorectal Surgery. “The accreditation is a testament to Markey Cancer Center’s commitment to multidisciplinary rectal cancer care and the hard work our team has done to ensure we are providing the best patient care.”

Additionally, Markey met accreditation standards addressing clinical services including carcinoembryonic antigen (CEA) testing, magnetic resonance imaging (MRI) and computerized tomography (CT) imaging for cancer staging, which allows patients to start treatment within a defined timeframe.

Markey surgeon Jon Hourigan, M.D., led the colorectal surgery team through the accreditation program, a process that takes several years.

Rectal cancer programs accredited by the NAPRC undergo a site visit every three years and are also accredited by the American College of Surgeons Commission on Cancer.

Accreditation by the NAPRC is granted only to those programs that are committed to providing the best possible care to patients with rectal cancer. NAPRC accredited programs follow a model for organizing and managing a rectal center to ensure multidisciplinary, integrated, comprehensive rectal cancer services.

Markey's gastrointestinal cancer team offers state-of-the-art cancer screening and diagnoses as well as the latest advances in surgical, radiation and chemotherapeutic interventions for patients with cancers of the colon and rectum. Learn more at <https://ukhealthcare.uky.edu/markey-cancer-center/cancer-types/gastrointestinal-cancer>.

With a team led by Dr. Jon Hourigan, the UK Markey Cancer Center became the first institution in Kentucky to earn the accreditation for its rectal cancer program.





GI & Colon Cancer Surgery Receives Recognition

In the 2022-23 *U.S. News & World Report*, gastroenterology and gastrointestinal surgery ranked as high-performing adult specialties, with colon cancer surgery given the high-performing designation for common adult procedures and conditions.

"Nowhere in the country is it more important for people to have access to complex and compassionate cancer care," said Mark Evers, M.D., director of the Markey Cancer Center.

"This ranking is a testament to the hard work of Markey's health care providers and staff, who are committed to ensuring that no patient has to travel outside the state for the care they need."

This year, *U.S. News & World Report* evaluated more than 4,500 hospitals across 15 specialties and 20 procedures and conditions.

HIGHLIGHTS



Dr. Jitesh Patel Named Division Chief of UK Colon and Rectal Surgery

In October 2022, Jitesh Patel, M.D., began serving as the new division chief of Colon and Rectal Surgery at the University of Kentucky. Dr. Patel will be stepping into the leadership position as the former chief, Sandra Beck, M.D., assumes her new role as Vice Chair of Education in the UK Department of Surgery.

For over 10 years, Dr. Beck served as head of Colon and Rectal Surgery while it was a section of General Surgery and through the first two years as its own division. In 2022, a re-organization of the Department of Surgery's leadership structure included the installation of vice chairs to manage various aspects of the department's foundational pillars. In anticipation of the demands of her new position combined with those of her surgical practice and role as Program Director of the General Surgery Residency, Dr. Beck announced her intention to relinquish being division chief.

Following that development, William B. Inabnet, M.D., the Johnston-Wright Professor and Chair of Surgery, called for self-nominations from the colorectal faculty to ensure equal opportunity for career advancement and alignment with the College of Medicine leadership equity initiative. Dr. Patel expressed an interest and was promoted to the position soon afterward.

Dr. Patel, who was promoted to Professor of Surgery in 2021, has led a very distinguished career at the University of Kentucky. In just seven years as a member of the UK HealthCare faculty, he has achieved numerous honors in clinical service, teaching, and research.

Dr. Patel served as Associate Program Director (APD) for the General Surgery Residency and has previously served as director of 3rd and 4th Year Medical School Surgery Clerkships for the UK Medical School. He recently stepped down from his role as APD to focus on his role of Program Director for the Colon Rectal Fellowship and to take on his new responsibilities as Division Chief. He is also the Medical Director for the General Surgery Clinic in the Kentucky Clinic.

He is a recipient of several of the top teaching awards available in the Department of Surgery. At the national level, Dr. Patel was inducted simultaneously with Dr. Beck into the American College of Surgery's (ACS) Academy of Master Surgeon Educators in October 2020.

As a researcher and surgeon, Dr. Patel was part of a multidisciplinary team that succeeded in reducing surgical site infection rates in colon surgeries to among the lowest in the nation. He also completed a master's in business administration from the Gatton School of Business and Economics in 2019.

to ensure that all programs exceed accreditation standards and remain at the cutting edge of surgery training across all specialties.

Dr. Beck has a distinguished record of service as a surgery educator. She has served as Director of the General Surgery Residency Program for nearly eight years and received multiple teaching awards from residents and medical students. In 2020, the American College of Surgery (ACS) recognized Dr. Beck and her colleague, Dr. Jitesh Patel, as Master Surgery Educators.

In anticipation of the demands of her new position, combined with those of her surgical practice and the General Surgery Residency program, Dr. Beck relinquished her role as division chief of Colon and Rectal Surgery. She will continue her service as the General Surgery Residency Program Director.



Dr. Sandra Beck Named UK Surgery Vice Chair for Education

The UK Department of Surgery announced in 2022 that Sandra Beck, M.D., accepted the offer to serve as Vice Chair for Education.

William B. Inabnet III, M.D., MHA, the Johnston-Wright Endowed Professor and Chair of Surgery, announced the new position as part of a reorganization of the department's leadership structure. The changes include the installation of several vice chair positions to manage various aspects of the department's foundational pillars.

She envisions the Vice Chair for Education position as an opportunity to partner with the department's educational office. In this role, Dr. Beck will work with the other residency and fellowship program directors

FACULTY



Sandra Beck, MD, FACS
Vice Chair for Education;
General Surgery Residency Program Director



Avinash Bhakta, MD, FACS



Jon S. Hourigan, MD, FACS



Jitesh Patel, MD, MBA, FACS
Division Chief; Colon and Rectal Surgery Fellowship Program Director

GENERAL, ENDOCRINE, & METABOLIC SURGERY

1,001

2021 Surgical Cases

1,345

2022 Surgical Cases*

7,186

2021 Clinic Visits

9,562

2022 Clinic Visits*

3

2021 Industry-sponsored, Federal, and
NIH grants

\$45,375

2021 Contract Income

*Decreased numbers attributed to COVID-19
pandemic and its impact on healthcare, globally.



WEIGHT LOSS LEADER

BARIATRICS SURGERY PROGRAM EXCEEDS EXPECTATIONS

In 2021, UK HealthCare and the Department of Surgery launched the new Weight Loss Surgery program, spearheaded by Joshua Steiner, M.D. And now, only two years later, the program – the first of its kind at UK – has surpassed more than 700 surgeries with no mortality for patients in the Commonwealth.

Previously in private practice, Dr. Steiner has been able to utilize his expertise in endoscopic and laparoscopic bariatric procedures to put the Weight Loss Surgery Clinic on the map. From larger patient rooms to scales that are easily accessible to its clientele, the state-of-the-art facility at the new Turfland campus was specifically designed for the needs of bariatric patients in mind.

Dr. Steiner started the program with master surgeons William Inabnet, M.D., and Scott Roth, M.D., which afforded the clinic more than 70 years of collective surgical experience. Yet the expectations of the program have been so high that Varun Jain, M.D., joined the team in 2022 to help meet the demand.

Not only will they benefit from these years of surgical expertise before their procedure, but patients can also expect personalized care well after the day of surgery.

“Bariatric surgery is not just about having an operation,” explained Dr. Steiner. “We consider ourselves lifelong partners with our patients.” This includes individualized post-operative care from the program’s nurse practitioners and dietitians, which are also located at the Turfland facility, making UK a one-stop shop for all weight-loss support.

Dr. Joshua Steiner (right), with an assist from Dr. Scott Roth and others, has piloted the bariatric surgery program since its inception in 2021.



Dr. Totten Honored as “40 Under 40 Female Surgeons”

Crystal Totten, M.D., was born to work in the healthcare industry. As the daughter of a hospital risk manager, she was always around patient care. “I always wanted to work in healthcare,” said Dr. Totten. “After deciding on pursuing medical school in high school, I persisted and ultimately committed to surgery as a 3rd-year medical student.” On UK’s faculty since 2018, Dr. Totten specializes in foregut, abdominal wall reconstruction and simulation education.

The Association of Women Surgeons (AWS) has recognized Dr. Totten’s efforts as one of its “40 Under 40 Female Surgeons.” These diverse candidates are trailblazers in their field who make a significant impact with their actions and were named as part of the AWS 40th anniversary celebration. “I feel incredibly honored to receive this recognition for my technical capabilities, notoriety in my specialty, but also for my leadership and equity projects,” said Dr. Totten. “I believe this highlights the opportunities and support here at UK for female surgeons and the teamwork with my department for diversity, equity and inclusion projects I have implemented.”

This award, which was selected by AWS leaders, doesn’t just highlight Dr. Totten’s dedication to her patients and students. It brings well-deserved attention to all women in the healthcare industry. “It is very important to recognize women in surgery as there are still significant disparities in the number of female-to-male surgeons,” said Dr. Totten. “Illustrating that this list of women who are the top in their field can lead as role models to the next generation of physicians who are still undecided about surgery.” Dr. Totten plans to continue focusing on patient optimization and wellness as well as progressing the UK general resident surgery simulation education curriculum.

HIGHLIGHTS



Dr. Varun Jain Joins Weight Loss Surgery Program

In December 2022, Varun Jain, M.D., joined the UKHC Weight Loss Surgery Program as an assistant professor of surgery at UK. Dr. Jain completed medical school and a general surgery residency from the University of Delhi in India, before moving to the United States. He then went on to pursue further general surgery residency training at UT Southwestern Medical Center in Dallas and then at Mayo Clinic in Phoenix. He completed a fellowship in minimally invasive (including robotic) general as well as bariatric/metabolic surgery at Mayo Clinic in Jacksonville, Fla.

He is an advocate for teamwork and multidisciplinary care in addressing the challenges of obesity management and related illnesses. He utilizes advanced laparoscopic and robotic surgical techniques to improve patient outcomes and recovery.



UK Surgery Chair Honored as a Master Surgeon Educator

William B. Inabnet III, M.D., surgeon-in-chief of UK HealthCare and chair of the Department of Surgery in the UK College of Medicine, was one of the 65 esteemed surgeon educators inducted into the American College of Surgeons (ACS) Academy of Master Surgeon Educators on September 30, 2022. This is an honorary distinction that recognizes surgeon educators who have devoted their careers to surgical education and are considered premiere leaders in their respective fields.

Inabnet joins fellow College of Medicine faculty members Sandra Beck, M.D., and Jitesh Patel, M.D., who were inducted in as master surgeon educators in 2020. Dr. Patel was recently named division chief of colon and rectal surgery, and Dr. Beck has been named vice chair of surgery education in the Department of Surgery.



PIE Council Sponsors Wireless Breast Pump Program

The UK Department of Surgery’s Professionalism, Integrity and Equity (PIE) Council – co-chaired by Crystal Totten, M.D. and Prakash Pandalai, M.D. – has sponsored a program providing surgery team members returning to work after maternity leave with access to wireless breast pumps.

Dr. Tessa London-Bounds, a cardiac surgeon, mother of two, and a researcher into breastfeeding access in the operating room, noted the minimal access women and mothers have to breast pump rooms near surgery suites or break areas. An avid supporter of wearable all-in-one wireless breast pumps, Dr. London-Bounds presented concerns and recommendations to the

department. The council responded by obtaining several Willow brand wireless breast pumps for distribution.

These all-in-one style breast pumps are designed to fit in bras and their no-spill technology allows practitioners freedom to work in the OR, clinic, or at their desk. The pumps are available to be checked out by any member of the surgical team to aid in their breast-feeding goals.

FACULTY



J. Scott Roth, MD, FACS
Division Chief;
Vice Chair for
Clinical Affairs



Erik Ballert, MD, FACS
Deputy Executive
Director of Veteran’s
Administration National
Surgery Office



William Cavatassi, MD, FACS



Oliver J. Fackelmayer, MD, FACS



William B. Inabnet III, MD, MHA, FACS
Department Chair



Varun Jain, MBBS



Cortney Y. Lee, MD, FACS
Section Chief of
Endocrine Surgery;
Medical Student
Clerkship Director



Melissa R. Newcomb, MD, FACS
Assistant Dean for
Assessment and
Evaluation; Section
Chief of General
Surgery, VA Medical
Center; Associate
Program Director,
General Surgery
Residency



David Sloan, MD, FACS, FRCS



Joshua Steiner, MD, FACS



Crystal F. Totten, MD, FACS
Co-Vice Chair of the
Department of Surgery
Professionalism,
Integrity and Equity

HEALTHCARE OUTCOMES & OPTIMAL PATIENT SERVICES

36

CY 2021 Resident/Student Journal
Articles Co-authorships

14

CY 2021 Resident/Student Presentation
Co-authorships

47

CY 2021 Faculty Journal Articles
Co-authorships

23

CY 2021 Faculty Presentation
Co-authorships

34

CY 2022 Resident/Student Journal
Articles Co-authorships

15

CY 2022 Resident/Student Presentation
Co-authorships

44

CY 2022 Faculty Journal Articles
Co-authorships

18

CY 2022 Faculty Presentation
Co-authorships

ADVANCING ACS QUALITY WITH VERIFICATION PROGRAMS

In early 2023, the UK Pediatric Surgery division began pursuing accreditation from the American College of Surgeons Children's Surgery Verification (ACS-CSV) program and participating in the ACS Quality Verification Program (ACS-QVP). Leading the process is Danielle Walsh, M.D., vice chair for quality and performance improvement for the UK Department of Surgery; David Rodeberg, M.D., division chief of pediatric surgery, is heading the Children's Surgery Verification process. They are joined in this effort by David Worhunsky, M.D., a member of the UK pediatric surgery faculty who is familiar with the ACS-CSV program from his experience as a surgical resident and fellow.

The pediatric surgery team partners with members of the Healthcare Outcomes and Optimal Patient Services (HOOPS) division of UK Surgery, which houses the advanced data collection services of UK's National Surgical Quality Improvement Program. Rena Warner, R.N., and Devauna Adkins, R.N., bring their years of experience as surgical clinical reviewers to support the effort. HOOPS division chief, Dan Davenport, Ph.D., provides his skills at data reporting and analysis.

Before coming to UK HealthCare, Drs. Rodeberg and Walsh were colleagues at East Carolina University's Brody School of Medicine, and helped build a pediatric surgery program at Maynard Children's Hospital in Greenville, N.C. In doing so, they laid the foundation for an approach to performance improvement that they will implement at Kentucky Children's Hospital.

Dr. Walsh is also board certified in clinical informatics and has been an outspoken advocate for surgical quality improvement through the strategic use of outcomes data. "In the present decade, we have come to recognize the value of using informatics to track surgical outcomes data to identify areas of opportunity for quality improvement and embed them in our system of care," said Dr. Walsh.

The ACS-QVP program imparts a formal structure to quality improvement. The idea is for pediatric surgical teams at Kentucky Children's Hospital to submit cases for data collection and analysis and subject that information to an external review by the Children's Surgery Verification program (CSV).

HIGHLIGHTS



Data + Process - A Powerful Collaboration

Outcomes data has long painted a detailed picture for surgeons at UK HealthCare, assisting with decision-making and driving changes in care. The experts are now taking their quest for better surgical outcomes to the next level with the recent addition of the nurse clinical review team to the Division of Healthcare Outcomes and Optimal Patient Services (HOOPS).

The integration of programs is an exciting move that has the potential to significantly improve surgical outcomes, said Daniel L. Davenport, Ph.D., HOOPS chief and professor in the Department of Surgery. "When you combine our ability to abstract and analyze data with actual process improvement, it's a powerful collaboration," he said.

Funded through the Center for Performance Services, the clinical nurse review staff brings with it vast experience in performance improvement processes. "The Enterprise support for our quality programs is encouraging," said Dr. Davenport. "We are looking forward to our evolution and growth. It will have benefits throughout UK HealthCare."

The bottom line for the Department of Surgery, he added, centers on the patient experience. "We want people to get the surgical care they need, to get out of the hospital quicker, to recover faster. We want death rates to go down. We want patient satisfaction to improve. We can achieve these goals by aligning our efforts," said Dr. Davenport.

HOOPS manages data collection and the reporting of risk-adjusted surgical outcomes to support the American College of Surgeons National Surgical Quality Improvement Program (ACS-NSQIP) and the Society of Thoracic Surgeons Cardiac and General Thoracic databases. In addition, it will soon do the same for the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP). HOOPS also offers biostatistics support, and methodological and data design consultation for students, residents and faculty who are performing research.



Data Analytics Comes to Weight Loss Surgery Program

Since its formal establishment in 2021, UK HealthCare's Weight Loss Surgery Program has experienced rapid growth. With that expansion — and the journey to accreditation — comes the requirement of collecting, analyzing and reporting clinical data and assessing surgical risk.

Devauna Adkins, R.N., senior NSQIP surgical clinical reviewer, already a vital member of the Division of Healthcare Outcomes and Optimal Patient Services (HOOPS) team, is now extracting data specific to metabolic and bariatric surgery patients.

"We are happy to support the Weight Loss Surgery Program as they meet the standards of the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP)," said HOOPS Chief Daniel L. Davenport, Ph.D. "It's information that is important to understanding outcomes and ultimately improving quality."

FACULTY



Daniel Davenport, PhD
Division Chief



Devauna Adkins, RN



Tiffanie Cavatassi, RN



Susan Mclean Risemberg, RN



Kim Poland, RN



Rena Warner, RN

PEDIATRIC SURGERY

1,216

2021 Surgical Cases

1,542

2022 Surgical Cases*

3,029

2021 Clinic Visits

3,411

2022 Clinic Visits*

0

2021 Industry-sponsored, Federal, and NIH grant

\$0

2021 Contract Income

*Decreased numbers attributed to COVID-19 pandemic and its impact on healthcare, globally.

CELEBRATING 25 YEARS

In fall 2022, Kentucky Children’s Hospital celebrated its 25th anniversary of serving the children of the Commonwealth. The hospital has grown since 1997, in both physical capacity and in the types of specialty care for every child, from infant to young adults.

“Before KCH, families would have to travel hours, sometimes to other states, to get the help their kids needed,” said Physician-in-chief Scottie B. Day, M.D. “This is a place that centers on family care, and keeping families together and close to home is essential to care and healing.”

At the time of its opening, Kentucky Children’s Hospital employed 70 pediatric specialists and 200 nurses. In 2022, there are more than 150 pediatric specialists and more than 405 pediatric nurses as well as dietitians, licensed clinical social workers, genetic counselors, child-life specialists, pharmacists and physical, occupational, speech and respiratory therapists.

The opening of the Makenna David Pediatric Emergency Department in 2010 provides the region’s only Level 1 pediatric trauma center and has a dedicated entrance with child-friendly waiting and treatment areas, along with staff trained to address the specific needs of pediatric patients.

Additional expansions include the Hematology/Oncology Clinic in 2017. Supported by the UK student-run DanceBlue 24-hour dance marathon, UK students have raised nearly \$20 million for the treatment of patients with cancer and blood disorders. And the 36,000-square-foot neonatal intensive care unit, where the tiniest and most vulnerable newborns are treated, helps facilitate and manage complex care.

The Division of Pediatric Surgery provides some of the country’s most advanced procedures right here in Kentucky. Because of this, UK’s extraordinary pediatric care can have an impact far beyond the state itself.





Dr. Abigail Martin (right) joins the faculty of Pediatric Surgery, along with Dr. Danielle Walsh, who also serves as the new Vice Chair of Quality and Process Improvement for the Department of Surgery.



Dr. David A. Rodeberg Joins UKHC as Chief of Pediatric Surgery

David A. Rodeberg, M.D., a nationally celebrated pediatric surgeon, recently joined the Department of Surgery as a provider and the Pediatric Surgery Division Chief.

He took the place of Dr. John Draus, the outgoing division chief and colleague who played an instrumental role in Dr. Rodeberg's recruitment. Dr. Draus accepted a new leadership role at a children's hospital in Jacksonville, Fla.

Dr. Rodeberg came to UK HealthCare from the East Carolina University Brody School of Medicine, where he served as the Verneda and Clifford Kiehn Distinguished Professor and Chief of Pediatric Surgery as well as Surgeon-in-Chief of Maynard Children's Hospital in Greenville, N.C.

His extensive clinical experience includes service as clinical co-director of the Pediatric Surgery Fellowship program at Children's Hospital of Pittsburgh of UPMC. He also spent six years as Pediatric Trauma Director at the Mayo Clinic in Rochester, Minn.

"The Department of Surgery is elated that Dr. Rodeberg has joined our faculty to serve the Kentucky Children's Hospital and the pediatric population of the Commonwealth; by all accounts, he is a superstar recruit," said UK Department of Surgery Chair William B. Inabnet III, M.D., MHA, FACS.

Dr. Rodeberg's practice is open and accepting new patients. Families may ask their children's doctor for a referral.



WALSH TO SERVE AS VICE CHAIR OF QUALITY AND PROCESS IMPROVEMENT

Danielle S. Walsh, M.D., FAAP, FACS, officially joined the faculty of the UK Department of Surgery in July 2022. Along with a pediatric surgery practice at Kentucky Children's Hospital, Dr. Walsh will serve as the surgery department's Vice Chair of Quality and Process Improvement. She joins her fellow colleague from the East Carolina University Brody School of Medicine, Dr. David Rodeberg, who came to UK several months earlier to lead the Division of Pediatric Surgery at UK HealthCare and Kentucky Children's Hospital.

Throughout her career, Dr. Walsh has been recognized as an excellent clinical surgeon, educator, and a national leader in healthcare with a keen interest in pediatrics, surgical quality, and outcomes improvement. As part of the clinical faculty of East Carolina University Brody School of Medicine for the past

11 years, Dr. Walsh served as Director of the General Surgery Residency Program and Director of Surgical Quality for the James and Connie Maynard Children's Hospital. She is also founder of Pirate Surgery, a private pediatrics specialty group in Greenville, N.C.

Dr. Walsh has held numerous national leadership positions. She served as President of the Association of Women Surgeons (AWS) and was elected to the Board of Governors of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES). In October 2021, she was elected Chair of the American College of Surgeons (ACS) Board of Governors. She joins the UK Pediatric Surgery team at Kentucky Children's Hospital, now consisting of five board-certified pediatric surgeons and three advanced practice providers.

Dr. Walsh completed a residency in General Surgery at Massachusetts General Hospital in Boston. She spent two years as a Fetal Surgery and Research Fellow at Children's Hospital of Philadelphia, then finished her postgraduate training as a Pediatric Surgery Fellow at Children's National Medical Center in Washington, D.C.

FACULTY



David Rodeberg, MD
Division Chief



Andrea Doud, MD
Medical Director,
Pediatric Trauma
Program



**Abigail Martin, MD,
FAAP**



Eric J. Rellinger, MD



**Danielle S. Walsh,
MD, FAAP, FACS**
Vice Chair for
Quality and Process
Improvement



**David Worhunsky,
MD**



Dr. Abigail Martin Joins Pediatric Surgery Faculty

In March 2023, the division of Pediatric Surgery welcomed Abigail E. Martin, M.D., to its faculty. Dr. Martin, a highly regarded pediatric surgeon specializing in intestinal rehabilitation, was the third faculty member to join the division at UK HealthCare during the 2022-23 academic year.

Prior to joining UK HealthCare, Dr. Martin was an associate professor of surgery and pediatrics with Sidney Kimmel Medical College at Thomas Jefferson University. She was also an attending pediatric and transplant surgeon at Nemours Alfred I. duPont Hospital for Children in Wilmington, Delaware.

As part of her service to UK HealthCare families, Dr. Martin has taken on leadership responsibilities as Director of Intestinal Rehabilitation at Kentucky Children's Hospital, spearheading the multidisciplinary care protocols for children with intestinal failure. Kentucky Children's Hospital is excited to add the Pediatric Intestinal Rehabilitation Clinic to its comprehensive slate of services.

The main condition that the program will treat is intestinal failure, which is commonly caused by short gut syndrome. This means that the patient cannot absorb nutrients and water because their intestine is either too short or doesn't work properly. The program is a multidisciplinary effort, with support from gastroenterologists, dietitians, radiologists and other pediatric providers.

"The data is clear that patients who are cared for by a multidisciplinary team do better and have fewer complications," said Dr. Martin. Treatments will include total parenteral nutrition, medication, surgery and rehabilitation.

Dr. Martin is also the lead physician for the Bioethics Committee, thus improving the infrastructure for resolving ethical dilemmas in the care of children.

PLASTIC & RECONSTRUCTIVE SURGERY

1,753

2021 Surgical Cases

1,934

2022 Surgical Cases*

12,818

2021 Clinic Visits

13,224

2022 Clinic Visits*

1

2021 Industry-sponsored, Federal and NIH grants

\$8,275

2021 Contract Income

*Decreased numbers attributed to COVID-19 pandemic and its impact on healthcare, globally.

DR. LIAU RETURNS TO HIS OUTREACH MISSION IN SOUTH AMERICA

Following a brief setback from the pandemic, James Liau, M.D., a plastic surgeon at UK HealthCare, resumed his annual mission trips to perform cleft lip and palate repair in Ecuador and Peru in fall 2021 and 2022. Peru was particularly rewarding as plastic surgery teams had not visited that country in over three years.

In 2009, as a chief resident, Dr. Liau had the opportunity to go with Henry Vasconez, M.D., the former division chief of plastic surgery, to Ecuador as part of an international team of specialists to provide care to patients born with cleft lips and palates. That meaningful experience opened his eyes, and his heart, to the needs of these patients, and he has been participating in mission work ever since.

To date, Dr. Liau has contributed to 22 mission trips, in Ecuador, Peru and Guatemala. Most of these trips have been in conjunction with two nonprofit foundations: Children of the Americas (COTA) and the Global Smile Foundation (GSF).

COTA, a Lexington-based organization, has led medical mission trips to rural Guatemala for nearly 30 years. GSF has also been operating for nearly 30 years and is Ecuador's largest provider of comprehensive cleft care.

His mission work was put on temporary hold in 2020, so the need for cleft lip and palate repair among the children's population called for creative action. "The logistics we worked out to protect patients and the surgical teams from COVID infection were quite impressive," said Dr. Liau. Despite the risks, children and families arrived by the hundreds to receive surgical and dental care.

Now that the immensity of the pandemic has passed, Dr. Liau is now able to take residents on these global health trips, which are approved by the Accreditation Council for Graduate Medical Education. "I feel this is a great opportunity for the residents, and I hope it leaves a positive impression as it did me in my residency," he said.

HIGHLIGHTS



Cleft Care Conference Hosted by Plastic Surgery

Kentucky Children’s Hospital and UK HealthCare Division of Plastic Surgery hosted the 33rd annual Tristate Craniofacial Conference on Oct. 21, 2022. This conference continued with the tradition of facilitating academic and professional exchanges between cleft care providers from Kentucky, Indiana and Ohio.

This multidisciplinary meeting focused on current and new treatments and techniques for craniofacial anomalies. Eric Friedlander, Kentucky secretary of the Cabinet for Health and Family Services, opened the conference to acknowledge Kentucky Children’s Hospital and the Kentucky government’s collaboration and investment in treating children with clefts and other craniofacial conditions in Kentucky.

The conference covered the full spectrum of cleft care, ranging from new research on cleft epidemiology, to complex craniofacial cases requiring cutting-edge techniques and technology.



Lectureship Established to Honor Dr. Henry Vasconez

The Division of Plastic and Reconstructive Surgery recently established an annual lectureship to honor the contributions of an esteemed emeritus faculty member and former division chief. The Henry Vasconez, M.D. Lectureship held its inaugural presentation in April 2023.

Dr. Vasconez joined the UK Plastic Surgery faculty in 1987 and served as its division chief for over 25 years, leading the Plastic Surgery integrated residency program. During that time, he co-founded Medical Missions Ecuador with his brother, Dr. Luiz Vasconez, chief of plastic surgery at the University of Alabama-Birmingham. The mission program served the needs of impoverished families in their home in Ambato, Ecuador. Following a year in which he pursued a Fulbright Research Scholarship, Dr. Vasconez accepted an offer to return to his home country and serve as the Dean of the College of Medicine at Universidad San Francisco de Quito.

FACULTY



David Drake, MD, FACS
Division Chief;
Director of Hand
Surgery Fellowship
and Service at
UK HealthCare



Morgan Brgoch, MD
Associate Program
Director of Integrated
6-Year Plastic Surgery
Residency



James Liaw, MD, FACS
Section Chief
of Pediatric and
Craniofacial Surgery



Amanda K. Silva, MD
Section Chief of
Microsurgery



Lesley Wong, MD, FACS
Program Director
of Integrated 6-Year
Plastic Surgery
Residency; Director of
Burn Unit

RESEARCH

\$5,682,665

FY23 Total Funding
36 Awards to 19 Principal Investigators
from 31 different Sponsors

\$4,284,584

National Institutes of Health (NIH)
Funding

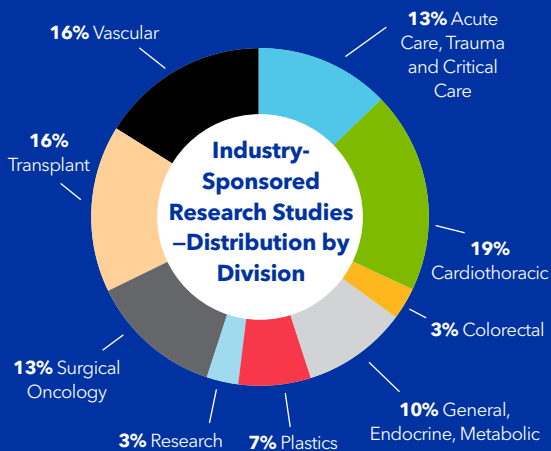
\$1,025,081

Industry-sponsored Studies

\$373,000

Non-profit Private Foundation Grants

The chart below represents the distribution of industry funded research ongoing in the department's nine clinical divisions.



FROM THE LAB TO THE BEDSIDE

DR. RELLINGER RESEARCHES TREATMENT OPTIONS FOR NEUROBLASTOMA IN CHILDREN

At the University of Kentucky, Eric Rellinger, M.D., is doing research on the metabolism of neuroblastoma in children. The research is focused on investigating potential new treatments that are less aggressive.

“My primary research interest is identifying metabolic vulnerabilities in high risk neuroblastomas,” said Dr. Rellinger. “The goal is to then design therapies targeting these pathways to be used alone or in conjunction with current treatment strategies to improve survival and or lessening side effects of treatment.”

This research is being funded by a Centers of Biomedical Research Excellence (COBRE) grant awarded to the UK Center for Cancer and Metabolism (CCM). The COBRE grant will make a significant difference for cancer treatment.

“Working with the faculty and leaders of the CCM offers enormous opportunity for me to grow my research career,” he said. “The University of Kentucky has several leading researchers in cancer metabolism. Their teams of scientists have built resources that give them a unique lens to understand how cancers use nutrients to survive and spread.”

Dr. Rellinger has dedicated his career to helping children. “Being a surgeon-scientist, I have a unique perspective on the real-world challenges that face healthcare providers and our patients,” he said. “This is my greatest strength in research, and my goal is to work with teams of people in the CCM to ask questions that are most beneficial to children with pediatric solid tumors.”

(continued on page 34)

Dr. Eric Rellinger (center), works with research scientists Beibei Zhu (left) and Michelle Pitts to find new treatments for high-risk neuroblastomas.



SITY OF KENTUCKY

SITY OF KENTUCKY



Eric J. Reiffinger, MD
Pediatric Surgery



As a pediatric surgeon his goal is to give kids the chance to have a long, healthy life. “Saving lifetimes is the slogan for the American Pediatric Surgical Association,” explained Dr. Rellinger. “It succinctly summarizes the unique impact that a pediatric surgeon can have as many of the roles that we play and procedures that we perform can drastically alter the length and quality of our patients’ lives for 70, 80, or even 100 years. There are few callings that offer such reward. I have a very unique opportunity here at the University of Kentucky to both try to help children that I see in the hospital and clinic, while also working to find new ways to diagnose and treat children with cancer in the laboratory.”

Dr. Eric Rellinger is also a pediatric surgeon who can put his research to use in the clinical setting.

His research began in September 2021 and has been supported by the COBRE grant since last year. The funding will continue thru 2024.

“The goal of the research is to expand our knowledge of the metabolism of high risk neuroblastomas, and if our findings can be used to help patients, there is an opportunity to continue and expand our research for my entire career.”

HIGHLIGHTS



Surgery Residents Awarded Provisional Patent on New Medical Device

Two residents in the UK General Surgery residency program were recently awarded a provisional patent for a novel emergency medical device called the “TalkiTourni.” Dr. Jennifer Castle and Dr. Brittany Levy, in partnership with the UK College of Engineering and Department of Computer Science, developed a prototype for an interactive smart tourniquet. The device senses a patient’s hemodynamics and instructs a user on how tight to make the tourniquet. The tourniquet signals when adequate pressure is achieved for arterial occlusion of an injured limb.

In recognition of their efforts, Drs. Castle and Levy were awarded the 2022 Zwischenberger-Rounsavall Fund for Innovation in Surgical Research and Education.



Dr. Castle Honored With Outstanding Research Award

Last fall, Jennifer Castle, M.D., was honored with the Outstanding Postdoctoral Research Award at the University of Kentucky College of Medicine Awards Convocation. This award recognizes demonstrated continuous success in research and service to the university and community by a postdoctoral trainee. Dr. Castle’s research focuses on sensitizing pancreatic neuroendocrine tumors to DNA damaging therapies. She has several projects focused on outcomes, healthcare trends, and patient access to care.

FACULTY



Marlene Starr, PhD
Division Chief



Cherry Ballard-Croft, PhD



Mei Gao, PhD



Francesc Marti, PhD



Anna Rockich, PharmD, MS
Director of Clinical Research Section



Hiroshi Saito, PhD



Dongfang Wang, MD, PhD
Director of Artificial Organ Laboratory



Congquin Wu, PhD



Zhongjiang Zhuang, MS

SURGICAL ONCOLOGY

1,246

2021 Surgical Cases

1,340

2022 Surgical Cases*

7,157

2021 Clinic Visits

7,637

2022 Clinic Visits

1

2021 Industry-sponsored, Federal, and NIH grants

\$26,657

2021 Contract Income

*Decreased numbers attributed to COVID-19 pandemic and its impact on healthcare, globally.

PANCREATIC EXCELLENCE

UKHC DIGESTIVE HEALTH PROGRAM EARNS NPF DESIGNATION

The UK Markey Cancer Center and UK HealthCare's Digestive Health Program earned Center of Excellence designations in 2023 by the National Pancreas Foundation (NPF).

As the only foundation dedicated to patients who are suffering from all forms of pancreatic disease, the NPF developed the Centers of Excellence program as a means to ensure that patients coping with pancreatic disease receive consistent, high quality, multidisciplinary care from institutions having earned that distinction.

In May, the NPF designated the Markey Cancer Center a Center of Excellence in recognition of its multidisciplinary approach to the treatment of patients with pancreatic cancer. The honor also acknowledged the research that Markey conducts to discover new advances in treatment and raise awareness and understanding of the disease.

"We are honored to receive the NPF designation, which highlights Markey's commitment to multidisciplinary treatment and providing the best and most innovative patient care possible," said Joseph Kim, M.D., Markey Cancer Center chief of surgical oncology. "The recognition is also a testament to the dedication of our entire pancreatic cancer team in delivering excellent patient care."

"We are thrilled to be recognized as a National Pancreas Foundation Center of Excellence."

Darwin Conwell, M.D.

Earlier in the year, UK HealthCare's Digestive Health Program was also recognized for its exceptional multidisciplinary approach to the treatment of pancreatitis, treating the "whole patient" in the hope of achieving the best possible outcomes and improve quality of life.

"We are thrilled to be recognized as a National Pancreas Foundation Center of Excellence," said Darwin Conwell, M.D., the Jack M. Gill Chairman of the UK Department of Internal Medicine and a longtime medical pancreatologist. "Designated NPF Centers have the educational

environment, research infrastructure, and clinical resources to provide state-of-the-art care for patients with various pancreatic disorders.”

In order to become an approved NPF Center, programs need to meet the criteria that was developed by a task force made up of experts and patient advocates. The criteria includes having the required expert physician specialties along with patient-focused programs such as pain management services and psychosocial support.



Dr. Darwin Conwell (left), chair of the UK Department of Internal Medicine, and Dr. Joseph Kim, chief of surgical oncology for Markey Cancer Center, oversee programs that both received National Pancreas Foundation designations this year.

FROM KENTUCKY TO HONDURAS

DR. BURKE PROVIDES BREAST CANCER CARE THROUGH ONE WORLD SURGERY

Last fall, surgical oncologist Erin Burke, M.D., completed a medical mission trip to Honduras through One World Surgery, where she and other volunteers provided breast cancer care to resource-limited Hondurans. Burke, assistant professor of surgery and associate program director of general surgery residency, joined UK HealthCare in October 2019, but has been involved with One World Surgery since she was a resident at the University of Minnesota.

“When I first started going, we did general surgery work, but over time we have been able to start working with a local cancer hospital to create weeklong trips focused on cancer care – breast cancer in particular,” said Dr. Burke. “It’s a really well-organized system that has grown from a trailer with one OR to now three ORs and an overnight unit.”

Over the course of the week, Dr. Burke and two other volunteer providers offered expert, critical cancer care to over 35 patients – everything from mastectomy and lumpectomy to sentinel lymph node biopsy and axillary lymph node dissection – and even some oncoplastic surgery to improve cosmetic outcomes when removing large benign tumors.

“Being able to provide the kind of expertise we are providing at Markey in Honduras is an amazing thing,” said Dr. Burke. “We can’t do everything that we do here, but it helps us figure out ways to get good quality care to resource-limited places and has helped me learn to adapt and be more flexible.”

Dr. Burke also sees provider and patient education as another critical component of the trip. On a previous trip, Dr. Burke helped host a full day of education for women’s care experts.

Dr. Erin Burke (right), a surgical oncologist, works with Dr. Maunel Elvir (left) to provide breast cancer care during her mission trip to Honduras.



FACULTY



**Joseph Kim, MD,
FACS**
Division Chief



**Mautin Barry-
Hundeyin, MD**



Dr. Erin Burke, MD
Associate Vice Chair
for Well-Being



Michael Cavnar, MD



**B. Mark Evers, MD,
FACS**
Vice Chair for
Research; Director,
Markey Cancer Center



Prakash Pandalai, MD
Co-Vice Chair,
Department of Surgery
Professionalism,
Integrity and Equity
Task Force



Welcoming Dr. Barry- Hundeyin

The Division of Surgical Oncology is pleased to welcome Mautin Barry-Hundeyin, M.D., to the UK Department of Surgery. Dr. Barry-Hundeyin joins the NCI-designated UK Markey Cancer Center as a surgical oncologist specializing in the management of hepatopancreatobiliary (HPB) and gastrointestinal (GI) malignancies.

Dr. Barry-Hundeyin attended Pennsylvania State University College of Medicine, where she was inducted into the Alpha Omega Alpha Honor Medical Society. She completed her General Surgery training at Harvard Medical School/Beth Israel Deaconess Medical Center, winning numerous teaching awards. She subsequently completed a post-doctoral research fellowship at New York University, where she published landmark papers in pancreatic cancer tumor immunology. Most recently, Dr. Barry-Hundeyin completed a fellowship in Complex General Surgical Oncology at Memorial Sloan Kettering Cancer Center in New York. In addition to her clinical practice, Dr. Barry-Hundeyin will be developing a basic/translational research program studying innate immune regulation of the tumor microenvironment. The goal is to discover novel immunotherapeutics that will ensure meaningful advancements in the care of cancer patients.

“We are thrilled that Dr. Barry-Hundeyin has joined our team. Her surgical expertise and translational research skills will strengthen and add depth to our UK cancer programs,” said Dr. Joseph Kim, Division Chief of Surgical Oncology. Dr. Barry-Hundeyin officially began her clinical practice at the University of Kentucky in October 2022.

TRANSPLANTATION

396

2021 Surgical Cases

333

2022 Surgical Cases

3,212

2021 Clinic Visits

3,179

2022 Clinic Visits*

4

2021 Industry-sponsored, Federal and NIH grants

\$110,944

2021 Contract Income

*Decreased numbers attributed to COVID-19 pandemic and its impact on healthcare, globally.

TRANSPLANT TEAM HELPS BEAM CONTINUE ITS LEGACY

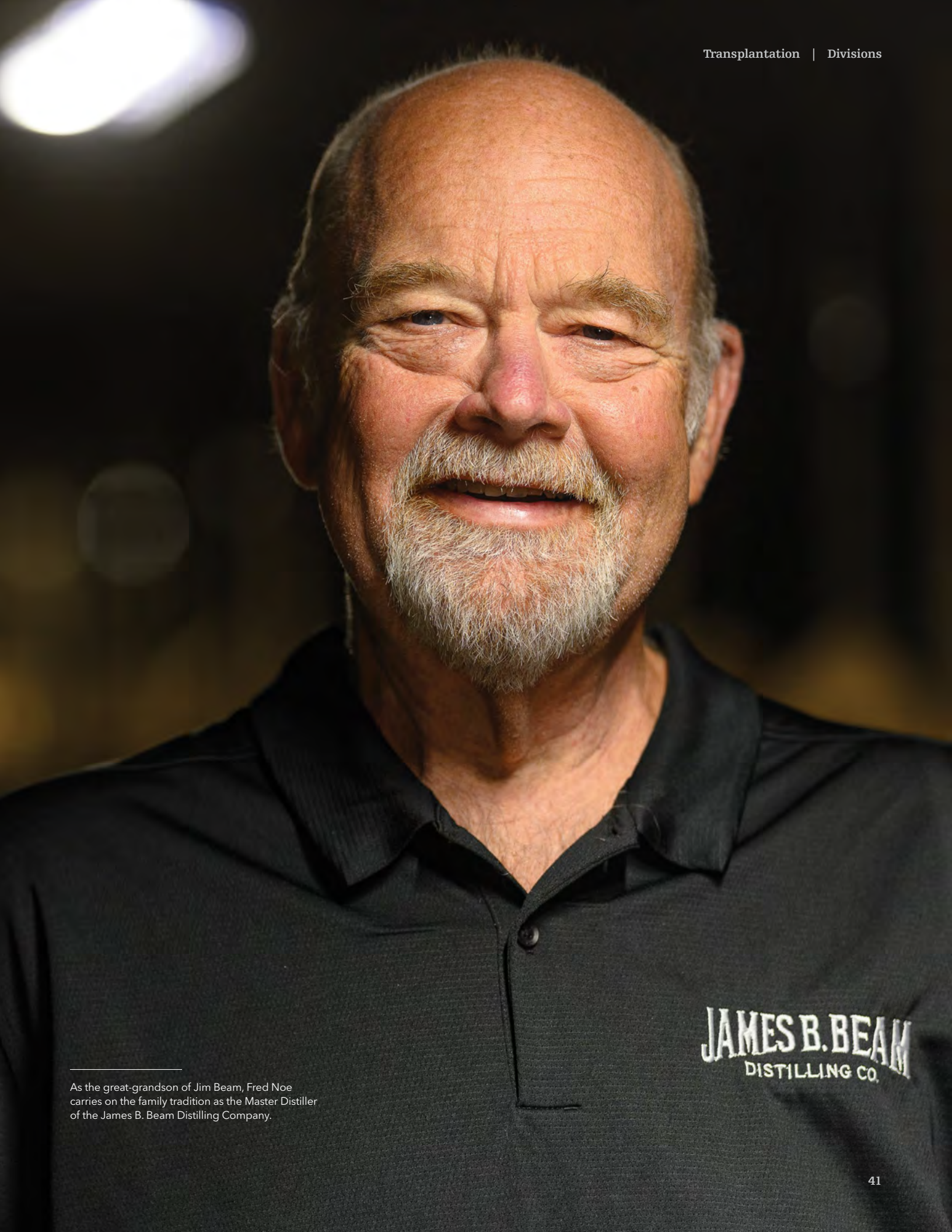
Fred Noe understands legacies. The great-grandson of Jim Beam and the seventh generation in his family to serve as Master Distiller at the James B. Beam Distilling Company, Fred grew up watching his father run the distillery. He also watched his father's health decline as he was diagnosed with diabetes and kidney failure and went through dialysis before passing away. So, when Fred developed health issues that mirrored his father's, he didn't want to follow the same path.

Fred sought care at the Nephrology Associates of Kentuckiana, a large nephrology practice that maintains a close working relationship with UK HealthCare's Transplant Center. The practice referred him to Dr. Malay Shah, surgical director of the Liver Transplant Program at UK HealthCare and a kidney transplant specialist. "I didn't think at my age—I said, well, you're not going to give a kidney to a guy who's 64 years old. But Dr. Shah said, 'Oh, you've got plenty of life left in you. We're going to do some tests and we'll see if you're a good candidate.'"

Preliminary testing showed that Fred was a promising candidate for transplant, kicking off the search for a donor. After his medical team ruled out Fred's wife and son as potential options, they needed a wider pool of candidates to have the best chance of finding a match. "Our head of HR, Paula Erikson, she called me one day and said, 'Fred, would you consider us opening up your search for a kidney to the company? There's a lot of people around the world that you've worked with over your career that I'm sure would love to step up, to help you with a kidney.'"

Paula was right. The search started locally, and after sending out emails to Jim Beam's three Kentucky plants explaining Fred's situation, several employees expressed interest in becoming his donor. One of those people was Plant Support Coordinator DeeAnn Hogan, who's been close friends with Fred for more than 25 years. Described by coworkers as "the glue that keeps everything together" at Jim Beam's two biggest plants, wanting to help her longtime friend was second nature for DeeAnn.

"Fred's been there with me through the birth of two children and my marriage," DeeAnn said. "He's just been my friend and confidant for years. Once I heard [he needed a kidney], I kept saying, 'Fred, what's your blood



JAMES B. BEAM
DISTILLING CO.

As the great-grandson of Jim Beam, Fred Noe carries on the family tradition as the Master Distiller of the James B. Beam Distilling Company.



type?’ When he said, ‘I’m A positive’—I’m A positive too, and I thought, ‘That’s our first sign.’” “Out of the blue, DeeAnn gave me a call and said, ‘I’m going to be your donor.’ I said, ‘What?’ She said, ‘Well, the first tests have come back, I’ve been praying on it and thinking about it, it’s going to work. We’re going to be a match.’ And she went on through the testing and sure enough, she became my match, and she gave me a kidney.”

“I had never been in the hospital one day of my life,” said DeeAnn. “I had my children at home. And so I started asking around, and a coworker’s ex-husband had just done it. She said, ‘He’s doing great, DeeAnn. Five days, he’s up, moving around.’ And I was like, ‘Heck, he’s older than me. I think I could do that too. I’m sure I’ll be fine.’” Fred and DeeAnn traveled to Lexington for the transplant procedure on April 23, 2021. Both of them were up and walking within days of their surgeries—and since both of them are taking their recoveries seriously and supporting each other through the process, they’re feeling better than ever.

“We’re in this together, and we always will be,” said Fred. “The gift she gave me is happiness and good health for the rest of my days. I get a chance to hang out with my grandson—to watch him go into school, hopefully play some ball, learn to drive. If I’d been on dialysis, there’s no way I would’ve seen that.” “We text every day,” said DeeAnn. “He’ll tell me, ‘Hey, I got my walk in today. I’m drinking water.’ And I’ll say ‘I did too.’ We just check on each other every day. I don’t feel a bit

Noe (left) with DeeAnn Hogan, his close friend and employee who also became his kidney donor after determining she was a successful match.

different—I would not know that I gave anything away, besides a few little incisions. I’m good to go.”

“I couldn’t imagine going anywhere else. I trust these people, I’ve been with them all through this, from talking about a transplant, to searching for a donor, to getting ready for the transplant, doing the transplant, and post. And I don’t think I could have had a better treatment anywhere in the world. Show me another place that has done an average of two kidney transplants a week and has a 97% success rate.”

Fred Noe

As they continue to recover, DeeAnn and Fred are participating in a research study managed by Dr. Meera Gupta. The study, which looks at the long-term physical effects of the transplant



on the donor and recipient, involves regular follow-ups and bloodwork in the coming months and years. Fred and DeeAnn were both happy to have a chance to spread the word about live organ donation and encourage others to be donors, knowing how life-changing the transplant was for Fred.

“The farthest thing from my life, from my world now, is thinking about the end of it. I’m looking forward to watching my son make his mark on the James B. Beam Distilling company. And then I’m also looking forward to my little grandson, who’s turning three this year—he could possibly be the ninth generation of Beams to come to work here. I’m thinking about the forward work, what we’re going to do going forward. It’s going to be really cool.”

HIGHLIGHTS



Access to Organs Is Complicated but Improving

While there has been a positive uptick in organ transplants in recent years, organ procurement remains complex. Because the United Network for Organ Sharing (UNOS) changed the guidelines, organs are available to hospitals up to 500 nautical miles away, rather than just to hospitals within the state where the organ is procured. Even with these obstacles, Malay Shah, M.D., surgical director of the Liver Transplant Program, is working to provide Kentuckians easier access to life-saving transplant care. Thanks to robust support from hospital administration, Dr. Shah and his team are better able to advocate for patients and build a stronger pipeline from organ procurement organizations to hospitals.



New Study Shows Hope for Older Patients With Liver Cancer

UK HealthCare’s Transplant Center and the Markey Cancer Center conducted a study of patients over 70 with a type of liver cancer called hepatocellular carcinoma (HCC) and how the outcomes of ablative treatments compare to liver transplants. During the study period, 214 patients with stage I or II HCC who received liver transplants were identified and compared to 2,377 patients who received ablation therapy. This was the first head-to-head comparison of liver transplant vs. non-transplant outcomes for HCC in elderly patients. They found that patients over 70 years of age still had a very significant survival benefit from transplant compared to receiving ablative therapy alone. Liver transplantation remains the standard of care for patients with HCC, regardless of age.

FACULTY



Roberto Gedaly, MD, FACS
Division Chief;
Director of the
Transplant Academic
Service Line



Alexandre Ancheta, MD



Siddharth Desai, MD



Meera Gupta, MD, FACS
Surgical Director,
Kidney Transplant
Program



Malay Shah, MD, FACS
Surgical Director, Liver
Transplant Program



VASCULAR & ENDOVASCULAR SURGERY

1,086

2021 Surgical Cases

1,397

2022 Surgical Cases*

4,890

2021 Clinic Visits

6,051

2022 Clinic Visits*

2

2021 Industry-sponsored, Federal, and NIH grants

\$6,144

2021 Contract Income

DR. KING BRINGS EXPERTISE TO UK

The UK Department of Surgery recently gained a seminal member of its faculty and a provider in the Division of Vascular and Endovascular Surgery with the addition of Ryan W. King, M.D.

“Dr. King has extensive training in vascular and endovascular surgery as well as significant research experience. He will be a great asset to our team of vascular surgeons and strengthen our ability to provide innovative exceptional care to our patients,” said Dr. Eleftherios Xenos, division chief of Vascular Surgery at UK. Dr. King completed the Vascular Surgery Integrated Residency program at the Medical University of South Carolina (MUSC) in summer 2022. In addition to his clinical work at MUSC, Dr. King distinguished himself in research and education.

As the recipient of the MUSC Department of Surgery Dabney Yarbrough Research Award for excellence in research, Dr. King was the first resident in an MUSC integrated program to earn this honor. It was also the first time it was awarded to a resident who conducted research while still in training. He was also awarded the Division of Vascular Surgery Tahlia Weis Teaching Award for his commitment and contributions to MUSC’s vascular surgery education. He has authored an impressive number of published journal articles early on in his surgical career and has obtained provisional patents on medical devices.

Dr. King earned his medical degree from the University of Central Florida College of Medicine. He obtained his bachelor’s degree in biochemistry at Saint Anselm College in Manchester, New Hampshire. “Dr. Ryan King was a highly sought recruit from the 2022 class of new surgeons. His outstanding clinical acumen and specialized training in complex endovascular surgical techniques provides a wonderful complement to our existing vascular surgery expertise. We are thrilled to welcome him to UK and the Department of Surgery,” said UK Chair of Surgery William B. Inabnet III, M.D., MHA, the Johnston-Wright Endowed Professor.

Dr. King’s practice at UK HealthCare began in September 2022.

*Decreased numbers attributed to COVID-19 pandemic and its impact on healthcare, globally.

HIGHLIGHTS



Vascular Care Merges Into One Location

Currently dispersed over four locations, vascular care will come together in July 2023 in one location to provide greater patient-centered care. Providers from vascular surgery, vascular medicine, podiatry, plastics, interventional nephrology, and wound care will become a part of an inclusive clinic that allows for comprehensive, team-based care for those patients with complex diagnoses.

“This novel and collaborative approach is aimed to break down barriers to care, improve access, reduce logistic complications, and provide a one-stop shop home for this complex patient population,” said Joseph Bobadilla, M.D., who will serve as the clinic’s medical director. The clinic will also include in-department imaging from the vascular lab to ensure diagnostic testing is more easily accessible to patients.

FACULTY



Eleftherios Xenos, MD, PhD, RVT, FACS
 Division Chief;
 Associate Chief
 Quality Officer of
 UK HealthCare



Joseph Bobadilla, MD, FACS



Eric Endean, MD, FACS
 Vice Chair for Well
 Being



Ryan W. King, MD



Dong Lee, MD



David Minion, MD, FACS
 Co-Director, Saha
 Aortic Center;
 Program Director
 of Vascular and
 Endovascular
 Fellowship



Tana Repella, MD, PhD



Mary B. Sheppard, MD
 Co-Director Saha
 Aortic Center



Sam Tyagi, MD, FACS



GLOBAL SURGERY

OUR GLOBAL REACH

Like everything within the UK HealthCare enterprise, it's the drive for a healthier Kentucky that fuels every endeavor within the Department of Surgery. Yet the advances made here have managed to find their way around the globe through the vast networks created by the department's providers. From mission trips to educational experiences, the Department of Surgery has collaborated with entities in the following countries to extend its community reach.

ECUADOR - David Worhunsy, M.D., a pediatric surgeon, spends about a month each year at Hospital Baca Ortiz working with surgical trainees from the Universidad San Francisco de Quito. Former Department of Surgery Division Chief Henry Vasconez, M.D., is now the Dean of the College of Medicine at this university (page 41).

GUATEMALA - James Liau, M.D., a plastic surgeon, recently resumed his mission work here, where he performs cleft lip and palate repair (page 40).

HONDURAS - Erin Burke, M.D., M.S., recently completed a medical mission trip to Honduras through One World Surgery. She and other volunteers provided breast cancer care in the resource-limited area (page 48).

INDIA - Varun Jain, M.D., who recently joined the UKHC Weight Loss Surgery Clinic, completed his general surgery residency at the University of Delhi (page 32).

KENYA - UK surgery alumna Kristin Long, M.D.; Carol Spears, M.D.; William Inabnet, M.D., MHA; and former UK faculty member Dan Kenady, M.D. have all spent time working at Tenwek Hospital in Kenya. Dr. Spears served as program director for close to a decade (page 8).

KOREA - Jin Woo Chung, M.D., Ph.D., a native of Korea, is a new faculty member in the division of Cardiothoracic surgery (page 25).

MALAWI - William Inabnet, M.D., recently spent two weeks at Nkhoma Mission Hospital in Malawi to establish this facility as a new rotation site for UK students, residents and faculty.

UNITED ARAB EMIRATES - UK surgery alum Dr. Carol Spears, M.D., spent a decade working with the Pan-African Academy of Christian Surgeons (PAACS) and now works at Kanad Hospital in the UAE (page 8).

ZAMBIA - Alexis K. Nickols, M.D., UK assistant professor of surgery, leads the American College of Surgeons' Operation Giving Back (ACS OGB) program (page 6). The department's new volunteer global surgery program has partnered with The University Teaching Hospital in Lusaka, Zambia's capital (page 6).







GLOBAL SURGERY

MAKING AN IMPACT AROUND THE WORLD

The UK Department of Surgery has started a formal volunteer global surgery program, which focuses on providing humanitarian surgical services to underserved communities around the world. The program aims to ensure volunteer surgeons contribute more to the local hospitals than simply their surgical skills.

UK is part of a consortium of university surgical departments partnering with The University Teaching Hospital in Lusaka, the capital of Zambia, a landlocked country in Southern Africa. The universities take turns providing month-to-month surgical services for the hospital.

The program is part of the American College of Surgeons' Operation Giving Back (ACS OGB) in Global Surgery. ACS OGB provides surgical care while also increasing the quality of education and training at several hospitals in Africa. Volunteer surgeons teach and learn from local surgeons while meeting the surgical needs of these underserved areas. They also collaborate with local surgeons on process improvements, research and education.

Volunteering in Zambia

Alexis K. Nickols, M.D., UK assistant professor of surgery, leads the ACS OGB quality improvement working group and plans to go to Zambia soon. The University Teaching Hospital has identified certain needs, including improving the research structure and the participation of surgeons and trainees in quality improvement. "One of my main goals is to get them actively doing quality improvement, so they understand exactly how to do it and how easy it can be to integrate it into the trauma system they already have," said Dr. Nickols.

Zambia has fewer than 40 surgeons in the entire country, so the need is tremendous. General surgery there can mean a wide variety of work, including orthopedics, burn management and treatment of tropical diseases.

Dr. Nickols volunteered in Malawi, which borders Zambia, during her surgical residency. The experience changed the way she approaches her work and made her a more adaptable surgeon. It also helped her appreciate the cultural differences of her patients at home. "I'm not from Eastern

Kentucky, so assuming that I will understand the way they approach a medical situation or assuming I understand the way that they're going to grieve a patient loss is completely inappropriate from my perspective," she said. "I approach it with a completely open mind, which is probably not something that I would have done before I went to Malawi as a resident. It has definitely made me a better communicator, particularly with Eastern Kentucky populations that have a very rich culture and history that I am still learning."

Global Health at UK

When faculty and residents volunteer for service programs like OGB in resource-strained areas, they use a wide range of skills, including innovation, problem solving, conflict resolution and perseverance. "You don't always know what to do," said William B. Inabnet, III, M.D., MHA, FACS, chair of the Department of Surgery. "You have to use the skills and equipment you have to solve the problem or treat the condition. It's not always easy."

Global surgery is one of the Department of Surgery's seven foundational pillars, along with optimal patient care; education; research; and professionalism, integrity and equity. A global health mission adds value and experience for trainees and faculty. The department wants to attract trainees who are service minded because part of its mission includes serving the rural population of the Commonwealth.

Dr. Inabnet hopes to start a global health surgery fellowship program at UK that would include a 6–12 month rotation at a hospital in Malawi. Residents could also volunteer at the hospital for 6 week rotations. "Global health really brings all the pillars of our department into one experience," he said. "Going on a service-related trip where you're giving back really helps ground you."

Dr. Alexis Nickols, an assistant professor of surgery, volunteered in Malawi as a resident and now works with the American College of Surgeons' Operation Giving Back program.



Global Surgery Access: By the Numbers

Lack of access to basic surgical care is one of the biggest challenges in global health. When people don't get surgeries they need, it impacts their quality of life and financial stability because of lost years of work.

5 billion

The number of people worldwide without access to safe surgical care

The percentage of global burden of disease that is surgical

30%

80 million

The number of people who die every year from preventable surgical conditions – more than from HIV, TB and malaria combined

Sources: The World Health Organization, Lancet Commission on Global Surgery, Global Surgery Foundation



GLOBAL SURGERY

A HISTORY OF SERVICE

The Department of Surgery has a rich history of graduates who have gone on to do international mission work after their training at UK.

A Passion to Help

UK surgery alum Carol Spears, M.D., played a significant role in transforming Tenwek Hospital in Kenya into a teaching hospital. The residents there have become faculty members training the next generation of African medical students.

While a general surgery resident at UK, Dr. Spears spent her research year learning from surgeons in Kenya. She then spent a decade working with the Pan-African Academy of Christian Surgeons (PAACS) and the Tenwek leadership to establish a General Surgery Residency Program. "It was not enough just to practice. Establishing a training program there became a passion," she said.

Now working at Kanad Hospital in the United Arab Emirates, Dr. Spears has maintained a connection with the University of Kentucky and been an inspiration to several UK residents who have volunteered their own time to pursue an interest in global surgery.

A Transformative Experience

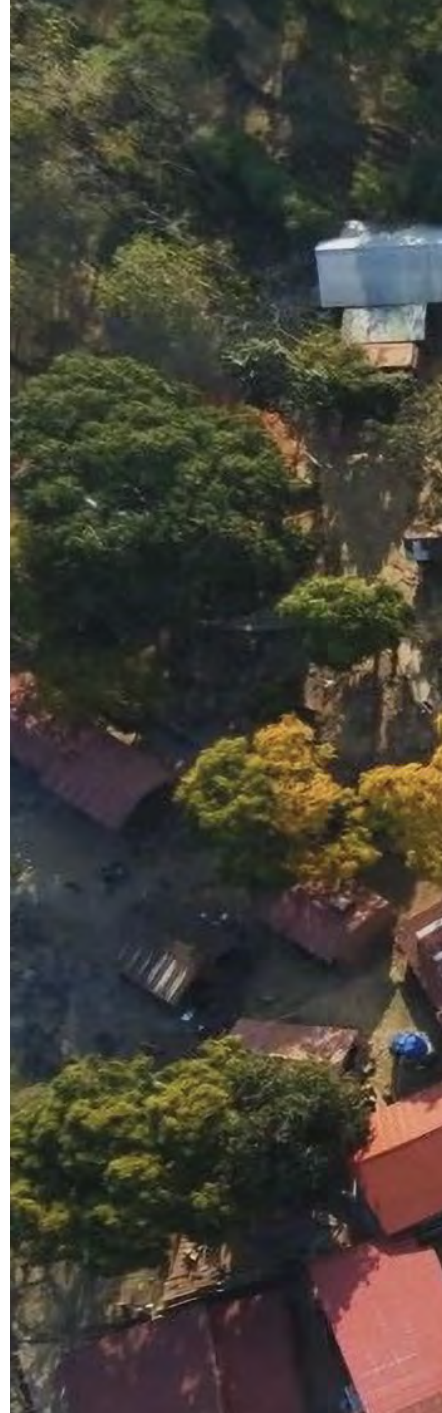
Kristin Long, M.D., a 2015 graduate of the UK General Surgery Residency program and an assistant professor in endocrine surgery at the University of Wisconsin, is an advocate for global surgery as an important facet of surgical education.

During her residency at UK, she spent a month at Tenwek Hospital with former UK faculty member Dan Kenady, M.D., who made an annual trek to the hospital to provide relief coverage for his former colleague Spears. "The month I spent at Tenwek was a transformative moment that confirmed that this is what I wanted to do with my career," said Dr. Long.

Department of Surgery Global Surgery Fund

The Department of Surgery Global Surgery Fund supports efforts to expand surgery access and care around the globe. Funds raised support travel, lodging and other expenses for faculty, residents, fellows, students and staff participating in the program.

Nkhoma Hospital in Malawi is a 100-year-old facility now serving as a teaching hospital. Dr. William B. Inabnet III, chair of the UK Department of Surgery, recently established a partnership with the hospital to include potential rotations for its general surgery residents.









GLOBAL SURGERY

DR. RICHARD FURMAN SHARES HIS STORY

Waking up early paid off for Richard W. Furman, M.D., FACS, when he was an intern with the UK General Surgery and Cardiothoracic Surgery residency program. A 1971 graduate, Dr. Furman returned to Lexington in 2022 for the celebration of UK Albert B. Chandler Hospital's 60th anniversary. He reminisced about his experiences and the lessons he learned during his years at UK.

Dr. Furman and his fellow interns would join rounds at 6:30 every morning. After that, they had to restart IVs, change dressings, take out stitches and perform other tasks before going to the operating room. Their next task was to get patients fully prepared for surgery by the time the attendings arrived at 8 a.m.

It soon became clear that none of the interns could get their patients ready for surgery on time. So, Furman began getting up earlier to complete all his tasks. When a first-year resident was drafted, a spot opened up for an intern to move up to resident status. UK's first Surgery Department Chair Ben Eiseman, M.D., told Furman the vote was unanimous. "He said, 'We're going to have you do it because you are the only intern that has everything ready by eight o'clock,'" recalled Furman while speaking to the current surgery residents. "I just pass that on to you to remember ... to do more than is expected."

Furman's persistence and hard work led to a 30-year career as a vascular surgeon, along with a lifetime of service. He and his brother, the late Lowell Furman, M.D., founded World Medical Mission (WMM) in 1977. Now the medical arm of Samaritan's Purse, WMM provides medical outreach programs around the world. The organization sends hundreds of medical professionals on short-term assignments to underserved hospitals each year. Furman himself has provided care to people around the world through times of war and natural disaster. He also advocated for U.S. medical aid to countries in need and secured millions in medical resources for WMM's hospitals and physicians. For his service, he received the International Surgical Volunteerism Award from the American College of Surgeons in 2019.

To this day, Furman keeps in touch with friends he made during his time at UK. "You develop friendships when you're here with other residents, you develop friendships with the attendings, and that to me is a big, big part of it," he said. "...I keep wondering what my surgical career would have been like if I did not come here to the University of Kentucky to get started. It was just a great foundation."

"You develop friendships when you're here with other residents, you develop friendships with the attendings, and that to me is a big, big part of it."

Richard Furman, M.D.

Dr. Richard Furman served many people in need during his trips abroad with World Medical Mission.



GLOBAL SURGERY

TRAINING DOCTORS IN AFRICA

In an effort to address the shortage of surgeons in Africa, the Pan-African Academy of Christian Surgeons (PAACS) trains doctors with a unique blend of academic and clinical training, mentorship and ministry.

PAACS offers a five-year general surgery program, as well as surgery residencies in orthopedics, pediatrics, obstetrics and gynecology, neurosurgery, and anesthesia, along with fellowships in cardiothoracic surgery, head and neck surgery, and surgical endoscopy. Doctors are trained to meet their patients' surgical and spiritual needs through a curriculum that includes discipleship and witnessing.

PAACS arose in 1998 as a way to curb the intellectual drain of African surgeons to Western countries. Many African physicians who trained abroad were not returning to their home countries, despite the enormous need for surgeons. Enter PAACS, with its programs in Kenya, Ethiopia, Tanzania, Gabon, Egypt, Malawi, Niger and other locations. Every one of the more than 120 PAACS graduates has stayed in Africa to serve. "They've all stayed to serve, and typically they're serving in rural and underserved environments," said William B. Inabnet, III, M.D., MHA, FACS, chair of the Department of Surgery and a PAACS volunteer.

The faith-based component is an important part of the mission, according to Inabnet. "There's a lot of fellowship as well as a prayer every day," he said. "They're training as surgeons but also as ambassadors for Christ. It's a really special group of people with a commitment to bettering the care of patients with surgical needs in Africa."

PAACS has produced many success stories, including Dr. Jean Faya B. Yaradouno, a PAACS graduate who is now the medical director and lone surgeon at Hope Clinic in Guinea. Inabnet and his wife hosted Yaradouno when he visited UK in 2022. Yaradouno grew up in a small village in Guinea, a coastal country in rural sub-Saharan Africa. He graduated from the PAACS program at Bongolo Hospital in Gabon in 2010 and returned to Guinea, where he performs surgeries for all kinds of conditions, including infections, tumors, hernias, trauma and congenital malformations. At UK, Yaradouno talked to pediatric residents and faculty, sharing stories about his life as a surgeon in a small, rural hospital. A fundraiser was held to support him and his hospital.

Inabnet, who is chair of the PAACS program committee, volunteered in Kenya in 2019. In February 2023, he returned with UK pediatric surgeon David Worhunsky, M.D., for a two-week skills training for 42 first- and second-year residents. The two led a "fundamentals of laparoscopic surgery" course that included using simulators to practice laparoscopic techniques. They also participated in other skills training, such as bowel anastomosis using pig intestines.

"It's a really special group of people with a commitment to bettering the care of patients with surgical needs in Africa."

William B. Inabnet, III, M.D.

Teaching PAACS students is rewarding on many levels, said Inabnet. "Yes, you're operating when you go on these trips, but you're teaching residents your skill set and they're teaching you things as well." He hopes more UK faculty and residents will volunteer for PAACS or other global health programs. "Having opportunities to serve in a global health capacity brings tremendous value to being a member of our department," he said. "I think it helps mold you into a more complete surgeon and it may inspire someone to pursue mission work as a career path."

Dr. David Worhunsky, pediatric surgery faculty, advises a Kenyan medical student on performing skills for a bowel anastomosis using a pig intestine.



KEY PERSONNEL

LEADERSHIP



William B. Inabnet III, MD, MHA, FACS, MAMSE

The Johnston-Wright Endowed Professor and Chair of Surgery



Sandra Beck, MD, FACS, FASCRS

Vice-Chair for Education; Program Director, General Surgery Residency



Mark Evers, MD, FACS

Vice-Chair for Research; Director, Markey Cancer Center



Margaret Griffen, MD, FACS

Vice-Chair for Leadership and Professional Development



Prakash Pandalai, MD

Co-Vice Chair, Professionalism, Integrity, and Equity; 4th Year Medical Student Director



Crystal F. Totten, MD

Co-Vice Chair, Professionalism, Integrity, and Equity



Danielle Walsh, MD, FACS

Vice-Chair for Quality and Process Improvement



Cortney Lee, MD, FACS

Director - 3rd Year Medical Student Surgery Clerkship



Mansi Shah, MD

Assistant Director - 3rd Year Medical Student Surgery Clerkship



Eric Endean, MD, FACS

Vice Chair for Well Being



David Drake, MD

Division Chief, Plastic and Reconstructive Surgery Program Director, Hand Surgery Fellowship



Shari Meyerson, MD, MEd

Program Director, Cardiothoracic Surgery Integrated 6-Year Residency Program & Cardiothoracic Surgery Fellowship Program



David Minion, MD, FACS

Program Director, Vascular and Endovascular Fellowship



Jitesh Patel, MD, FASCRS, FACS

Division Chief, Colon and Rectal Surgery; Ambulatory Clinics Director; Program Director, Colon & Rectal Surgery Fellowship



Jessica Reynolds, MD

Program Director, Critical Care Surgery Fellowship



Lesley Wong, MD, FACS

Program Director, Plastic & Reconstructive Surgery Program



Dr. Erin Burke, MD

Associate Vice Chair for Well-Being



J. Scott Roth, MD, FACS

Division Chief; Vice Chair for Clinical Affairs

KEY PERSONNEL

RESIDENTS & FELLOWS

2023-24

RESIDENTS**General Surgery Residency****PGY 1**

Emily Cassim MD
Lekha Devara, MD
Rylie Frayman, MD
Megan Ireland, MD
Meredith Johnson, MD
Osvaldo Mendez, MD
Madison Sands, MD
Manasa Veluvolu, MD

PGY 2

Cody Crnkovic, MD
Jacob Hubbuch, MD
Noah Jordan, DO
Jessica McKelvey, MD
Cristina Ortega, DO
Gabriele Pate, MD
Aum Patel, MD
Adam Rooks, MD

PGY 3

Carly Celebrezze, MD
Mackenzie Humphrey, MD
Brittany Levy, MD
Tejas Nandurkar, MD
Kyle Ridlen, MD
Marina Robson Chase, MD
Morgan Sindall Burrows, MD
Andrew Whipkey, MD
Omar Zaki, MDD

PGY 4

Elizabeth Bittner, MD
Jennifer Castle, MD
Amber James, MD
Katherine McClain, MD

Reagan Stafford, MD
Wesley Stephens, MD
William Witt, MD
Daniel Yackzan, MDD

PGY 5

Joshua Bell, MD
Charles Campbell, DO
Alexandra Cocca, MD
Satya "Sai" Dalavayi, MD
Megan Harper, MD
Erin McAtee, DO
Kyle Murphy, MD
Gustavo Ortega, MD

**General Surgery
Research Year**

Madeline Anderson, DO
Hannah McDonald, MD
Anna Reagan, MD

Preliminary Interns

Logan Beutler, DO
Brian Bishop, MD
Dylan Cooper, MD
Shelley Feng, MD
Sheddie Gonzalez-Castillo, MD
Tejesh Guddanti, MD
Loyall Harris, MD
Russell Hendrycks, MD
Blake Jackson, MD
Joshua Jenkins, DO
Jonathan Liles, MD
Tyler Loose, MD
Mit Patel, MD
Eduard Pey, MD
Tejas Sardar, MD
Victoria Walker, MD

Zhuang-Yao Daniel Wei, MD

**Cardiothoracic Surgery
Integrated 6-Year Residency****PGY 1**

Jeffrey Hutchens, MD

PGY 2

Daniel Mohammadi, MD

PGY 3

Alan Parr, MD

PGY 4

Andrew Gorton, MD

PGY 5

Andrew Bishop, MD

PGY 6

Thomas Marsden, MD

**Plastic and Reconstructive
Surgery Integrated 6-Year
Residency****PGY 1**

Annahita Peterson, MD
Kaitlyn Samuels, MD

PGY 2

Bradley Miyake, MD
Sara Taege, MD

PGY 3

Sydney Char, MD
E. Abi Recktenwald, MD

PGY 4

Susan "Tucker" Kornegay, MD

Evan Lynch, MD, PhD
Garrett Minor, MD

PGY 5

Margaret Wetzel, MD

PGY 6

Miriam Henry, MD
Ahmed J. Al Bayati, MD

FELLOWS**Thoracic Surgery Fellowship****PGY6**

Malcolm Jefferson, MD

**Colon and Rectal Surgery
Fellowship**

Alex Menning, DO

Hand Surgery Fellow

Christopher Pinkowski, MD

**Surgical Critical Care
Fellowship**

Kyla Fredrickson, MD
Christopher Pearcy, MD

Vascular Surgery Fellowship**PGY 6**

Peter Albrecht, DO
Roger Michael Courmoyer, MD

PGY 7

Travis Hughes, MD

NEW LECTURESHIP HONORS LEGACY OF UK CAREER SURGEONS

Dr. David Sloan and Dr. Patrick McGrath of Markey Cancer Center and Dr. Eric Endean of Gill Heart & Vascular Institute have spent decades caring for patients at UK HealthCare. To honor their momentous impact – as well as the hard work of other surgeons with long careers at UK – the UK Department of Surgery Foundation and Legacy Lectureship Fund was created.

“The Department of Surgery is establishing this lectureship and chose to honor three of the longest tenured surgeons in the department,” said Dr. McGrath.

Dr. William Inabnet, surgeon-in-chief of UK HealthCare, is helping spearhead the effort to commemorate these esteemed surgeons and support the continued growth of other surgeons in the department.



The Department of Surgery Foundation and Legacy Lectureship is established in honor of surgery faculty who've dedicated their careers in service to Kentucky patients at UK HealthCare. This includes (from left): David A. Sloan, M.D. (30 years of service), Patrick C. McGrath, M.D. (34 years of service), and Eric D. Endean, M.D. (35 years of service).

Drs. Sloan, McGrath and Endean all plan to retire in the coming years. Their extensive experience highlights the Department of Surgery's dedication to cultivating surgeons who can treat the unique health care needs of Kentuckians, including the critically underserved in Appalachia, for years to come.

Funding will provide annual or semi-annual lectures, mentoring, and leadership development opportunities for residents and faculty.

Alumni, faculty and staff interested in donating to the Legacy Lectureship Fund, please use the QR code below.



Philanthropic support continues to be vital to the department's continued success and serves as a key accelerator for pillar-based initiatives. To learn more about giving opportunities, contact Lindsey Clem, director of philanthropy at jlclm4@uky.edu or make a gift using the QR code.

AN EDUCATION IN EQUITY

PROFESSIONALISM, INTEGRITY AND EQUITY (PIE) TRAINING BECOMES A FOUNDATIONAL PILLAR IN THE DEPARTMENT OF SURGERY

To become a doctor, residents undergo a spectrum of training that helps them fully understand what the body is capable of. But it's often the basic human interaction – the face-to-face conversations, the nonverbal gestures, the empathic rapport – that fully solidifies the patient/provider bond. The Department of Surgery created its own council to raise awareness of how professionalism, integrity and equity (PIE) play a prominent role in developing those relationships. The PIE Council is co-chaired by Drs. Crystal Totten and Prakash Pandalai and includes a number of faculty and staff in the Department of Surgery. “[Our goal] is to bring a combination of education and awareness to the kind of everyday issues that humans experience,” said Dr. Pandalai.

“We are all linked together by a common mission, but everybody brings personal experience to the table.”

Prakash Pandalai

It's this personal experience that often influences our biases, which is one of the motivations for the council's existence. “How we train residents is based on quick thoughts – does this patient look sick or not sick – and all those judgements are built on experience and individual biases,” explained Dr. Totten. “So, we're having the conversation and awareness of what their life experience has been, which can be very different from others. We want them to be aware of potential health inequities and treat the human in front of them with empathy and the best overall care.”

PIE – the Department of Surgery's acronym that aligns with the university's diversity, equality and inclusivity efforts – is often associated with race and gender issues. And while these make up a strong component of the PIE movement, socioeconomic concerns are also a consideration for the council. “There's a whole socioeconomic aspect to it,” said Dr. Pandalai. “We realize that we have patients, for example,

from Pike County, who are some of the poorest in the country. So, they need to factor in that information when thinking about their care.” For example, the 2-hour drive from Pikeville to Lexington means factoring in gas money, time off work, just to get a PET scan. “How are they going to do that,” explained Dr. Pandalai.

However, it is worth noting, as Dr. Totten points out, that the field of surgery has been known for its gender disparity. “OR culture is historically male surgeons and female nurses,” she said. “But we have 50% female surgery residents now, we're educating them on how to stand up for yourself and stand up for those around you.”

The council developed the following as its core pillars: Education; Review, Recruit, and Retain; Community Outreach; Professional Network. And luckily, Dr. Totten sits on the DEI pillar of the American College of Surgeons, which affords her access to information regarding mentorship, networking opportunities and meetings with faculty, residents, and medical students.

Recently, the council embarked on a 3-year longitudinal study to evaluate the Department of Surgery's understanding of PIE topics. “Each year we have incrementally increased as far as feeling supported by the department,” noted Dr. Totten. Yet they are extending their reach beyond the walls of the department. Faculty are also participating in outreach events, including a regular program at Frederick Douglass High School in Lexington. Students get the opportunity to interact with surgeons and a chance to realize the potential of taking this path for their own careers.

“We show all different faces of a surgeon. We don't look like the cover of ‘ER’ or ‘Gray's Anatomy,’” said Dr. Totten. “The number of times I've had a young woman of color say, ‘I can do this, too,’ that to me is the most rewarding thing, to push the next generation forward.”



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